

No. 8235

United States

Cut to 2

Circuit Court of Appeals

For the Ninth Circuit.

LOUIE J. ANTONSEN,

Appellant,

vs.

C. C. HEDRICK, Individually, and doing business
under the assumed name and style of PAPER
EXCELSIOR & PAD CO.,

Appellee.

Transcript of Record

Upon Appeal from the District Court of the United
States for the District of Oregon.

FILED

JUL 29 1936

PAUL F. O'BRIEN,

United States
Circuit Court of Appeals
For the Ninth Circuit.

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[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in *italic*; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in *italic* the two words between which the omission seems to occur.]

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for Appellant.

C. O. FENLASON,
Pittock Block, Portland, Oregon,
for Appellee.

In the District Court of the United States, for the
District of Oregon.

In Equity No. E-9311.

LOUIE J. ANTONSEN,

Plaintiff,

vs.

C. C. HEDRICK, individually, and doing business under the
assumed name and style of Paper Excelsior & Pad Co.,
Defendant.

CITATION.

The President of the United States to C. C. Herick, individually,
and doing business under the assumed name and style of
Paper Excelsior & Pad Co., Defendants; Greeting:

YOU ARE HEREBY CITED to be and appear at a session
of the United States Circuit Court of Appeals for the 9th
Circuit, to be held at the City of San Francisco, in the State
of California within thirty (30) days from the date of this
citation, pursuant to this appeal taken and filed in the office of

Clerk of the District Court of the United States for the District of Oregon, wherein Louie J. Antonsen is the Appellant, and you are the Appellee, to show cause, if any there be, why the decrease in said appeal mentioned should not be reversed or corrected, and why speedy justice should not be done in that behalf.

WITNESS The Hon. Judge Fee, Judge of the United States District Court for the District of Oregon, this 14th day of December, 1935.

JAMES ALGER FEE

Judge.

Service of the within citation and receipt of copy thereof admitted this 14 day of Dec. 1935, together with copy of Petition for Appeal, Assignment of Errors and Order Allowing Appeal.

C. O. FENLASON

Counsel for Defendant. [1*]

In the District Court of the United States for the
District of Oregon.

July Term, 1932.

BE IT REMEMBERED, That on the 17th day of August, 1932, there was duly filed in the District Court of the United States for the District of Oregon, an Amended Bill of Complaint which, omitting the verification, is in words and figures as follows, to wit: [2]

[Title of Court and Cause.]

AMENDED BILL OF COMPLAINT.

By leave of court, plaintiff files his amended bill of complaint and complains of the defendant and alleges:

I.

Plaintiff is a citizen of the United States, having his residence at Seattle, King County, Washington; defendant C. C. Hedrick is a citizen of the United States, residing at Portland, Multnomah County, Oregon, and doing business under the assumed name and style of Paper Excelsior & Pad Co.

II.

The jurisdiction of this court depends upon the fact that this is a suit in equity based upon United States Letters Patent No. 1,731,967, dated October 15, 1929, relating to improvements in shredding machines of the type adapted to manufacture paper excelsior, and embodying a new mechanical process for manufacturing paper excelsior, and this suit is brought for infringement and threatened infringement of said letters Patent, and is brought in equity because an injunction is necessary for the protection of plaintiff's rights which will be irreparably injured unless the infringing acts and threatened infringing acts of the defendant are enjoined, and also because the plaintiff has no adequate remedy at law. [3]

III.

Plaintiff avers that prior to August 30, 1926, he was the true, first and sole inventor of the inventions described in the Letters Patent mentioned in the last preceding paragraph, which inventions were not known or used by others in the United States before plaintiff's invention or discovery thereof, and not patented or described in any printed publication in the United States or in any foreign country before said invention or discovery thereof, or more than two years prior to plaintiff's application for Letters Patent of the United States, and no one of said inventions described in said patent was in public use or on sale

in the United States for more than two years before plaintiff's application for said patent, nor ever abandoned, and no application for Letters Patent upon any of said inventions had been made by said Louie J. Antonsen, plaintiff herein, his representatives or assigns, in any country foreign to the United States on an application filed more than one year before his application in this country and not abandoned.

IV.

On August 30, 1926, plaintiff duly made application for Letters Patent of the United States for said inventions, and thereafter, due proceedings being had, Letters Patent of the United States bearing date October 15, 1929, and No. 1,731,967, as aforesaid, were duly issued upon said application in due conformity with law, granting to said Louie J. Antonsen, his heirs and assigns, for the term of seventeen years from said October 15, 1929, the exclusive right to use said new mechanical process for manufacturing paper excelsior and the exclusive right to make, use and vend said inventions throughout the United States and territories thereof; and the plaintiff here makes proffert of and brings into court [4] the original of said Letters Patent, or duly authenticated copy thereof, and prays that the same may be taken as a part of this amended bill of complaint.

V.

The inventions embodied and described in said patent are of great utility and value, and this plaintiff has been put to great trouble and expense in and about said inventions for the purpose of introducing the same into use and making the same profitable to the plaintiff and useful to the public. Said inventions have been and are of great profit and advantage to the plaintiff and to the public, and the public has generally acknowl-

edged and acquiesced in the rights of the plaintiff granted to him by said patent, and plaintiff believes that he will continue to receive large profits therefrom if further infringement by said defendants and their confederates shall be prevented.

VI.

Said defendant, well knowing the premises and the rights secured to the plaintiff herein as aforesaid, without license or permission and in violation and infringement of plaintiff's rights under said Letters Patent No. 1,731,967, and contriving to injure the plaintiff and to deprive the plaintiff of the benefits and advantages which might and otherwise would accrue unto plaintiff from said invention, after the issuing of the Letters Patent as aforesaid, and before the commencement of this suit, did unlawfully and wrongfully make and use in the District of Oregon and elsewhere in the United States, and is now making and using and is threatening to make and use in said district excelsior machines containing, embodying and employing the invention of said Letters Patent No. 1,731,967, and is using [5] the method of manufacturing paper excelsior which consists of tearing sheets of paper stock into narrow strips, separating said strips and piling them in haphazard fashion, which method was invented by plaintiff herein and is embodied in said Letters Patent.

VII.

Plaintiff has given due and legal notice to the defendant of said Letters Patent and of the infringement herein complained of.

VIII.

The said defendant has derived and received and will derive and receive from the aforesaid infringements large gains, profits

and advantages, but to what amount plaintiff is not informed and cannot set forth; and plaintiff, by reason of the aforesaid infringements, has been and will be deprived of and prevented from receiving, if such infringements are not restrained by this court, all gains and profits to which plaintiff is lawfully entitled and which plaintiff would have derived and received and would be now deriving and receiving but for the aforesaid infringements; and by reason of the aforesaid infringements, the plaintiff is irreparably injured and has sustained loss and damage thereby, and, unless the aforesaid infringements are restrained by an order and writ of injunction issuing out of this court, further irreparable loss, injury and damage will be caused to the plaintiff.

IX.

Plaintiff further shows to this honorable court that patent No. 1,731,967 has been heretofore adjudged and found valid and infringed by devices and constructions substantially similar and in all respects equivalent to the devices and constructions which defendant herein has made and used as hereinbefore com- [6] plained of, and said patent has been found infringed by the use of the new mechanical process for manufacturing paper excelsior as described in plaintiff's said patent; and in particular plaintiff shows to the court that said patent has been adjudicated in the suit of plaintiff herein, Louie J. Antonsen, against Joseph Scherman, in the United States District Court for the Northern District of California, Southern Division, and was there found valid and infringed by a machine and apparatus similar in all essential respects to the defendant's machine herein complained of; and subsequent to said adjudication, in a suit brought by plaintiff herein against the Winter Paper Stock Company, an Ohio corporation, in the United States District

Court for the Northern District of Ohio, Eastern Division, by a construction similar in all essential respects to the defendant's machine herein complained of, and by using the method for manufacturing paper excelsior described in plaintiff's patent, and said patent was found valid and infringed by the use of said defendant's machine and by the use of said method; and plaintiff is ready to produce, as this Honorable Court may direct, authenticated copies of said decrees and of the opinions of these courts respectively accompanying the same, and proof of the construction and devices found infringing.

X.

Plaintiff is informed and believes, and therefore avers, that said defendant is prepared and ready to continue such infringement, and has declared his intention of so doing, and unless he is restrained from so doing this plaintiff will suffer irreparable damage and injury from such unlawful acts. [7]

WHEREFORE, plaintiff prays for a decree:

1. Adjudging that plaintiff's aforesaid Letters Patent, No. 1,731,967, dated October 15, 1929, are good and valid and are owned by plaintiff and have been infringed by the defendant, C. C. Hedrick.

2. That defendant, his attorneys, servants, agents, workmen and employes, and each of them, may be perpetually enjoined and restrained by a writ of injunction issued out of and under the seal of this Honorable Court from directly or indirectly manufacturing, using, and/or selling, and/or causing to be manufactured, used, and/or sold, and/or threatening to manufacture, and/or use or sell, machines or devices made in accordance with the inventions covered by said Letters Patent, and from using the method or mechanical process of manufacturing paper ex-

celsior described in said patent, and from in any wise infringing said Letters Patent, and/or contributing to the infringement of said Letters Patent by others, and/or conspiring with others to so infringe said Letters Patent in any way whatsoever;

3. That a preliminary injunction may be granted to the plaintiff against the defendant to the same purport, tenor and effect as hereinbefore prayed for in regard to said perpetual injunction;

4. That the defendant be ordered and decreed to deliver to the plaintiff all paper excelsior made according to the mechanical process described in plaintiff's said patent, or that such paper excelsior be destroyed, or that the same be impounded by this Honorable Court for such disposition as to the Court may seem just and proper;

5. That the defendant be decreed to account to the plaintiff for all the gains, profits and advantages realized by [8] said defendant from his infringement and unlawful use and practice of the inventions patented in and by said Letters Patent, and in addition to said gains, profits and advantages to be so accounted for, the damages sustained by the plaintiff as a result of said infringement;

6. That a writ of subpoena ad respondendum may issue forthwith out of and under the seal of the Honorable Court directed to said defendant, requiring him by a day certain and under a certain penalty, to appear and make full, true and perfect answer (an answer under oath being hereby expressly waived) to the amended bill of complaint here and to stand to, perform and abide by such further order, direction and decree as may be made against him;

7. That the defendant may be decreed to pay the costs, charges and disbursements of this suit;

8. That the plaintiff may have such other and further relief in the premises as the equity of the case may require and as to the court may seem meet and just.

LOUIE J. ANTONSEN

Plaintiff.

J. P. WINTER

NORMAL KUYDENDALL,

Solicitors and Counsel for Plaintiff.

[Endorsed]: Filed August 17, 1932. [9]

AND AFTERWARDS, to wit, on the 25th day of November, 1932, there was duly filed in said Court an Answer to Amended Bill of Complaint, which, omitting verification and exhibit attached thereto is in words and figures as follows, to wit: [10]

[Title of Court and Cause.]

ANSWER.

Comes now the defendant above named, C. C. Hedrick, an individual doing business under the assumed name and style of Paper Excelsior & Pad Co., and for his answer to the amended Bill of Complaint on file herein, admits, denies and alleges as follows:

I.

Admits the allegations contained in Paragraph I thereof.

II.

Answering the allegations contained in Paragraph II of said Bill, admits that the jurisdiction of this Court depends upon the fact that this is a suit in equity based upon United States Letters Patent No. 1,731,967, dated October 15, 1929, which said patent relates to a paper excelsior machine; admits that this suit is brought for an alleged infringement and threatened

infringement of said Letters Patent, and save as just admitted, defendant denies each and every allegation in said paragraph contained and the whole thereof.

III.

Answering the allegations contained in Paragraph III of said amended Bill, defendant denies each and every allegation therein contained and the whole thereof.

IV.

Answering the allegations contained in Paragraph IV of said [11] Amended Bill, defendant admits that on August 30, 1926, plaintiff made application for Letters Patent of the United States relative to a paper excelsior machine and that Letters Patent of the United States bearing date of October 15, 1929 and No. 1,731,967 were issued to said plaintiff Louie J. Antonsen, and save as just admitted, defendant denies each and every other allegation of fact in said paragraph contained and the whole thereof.

V.

Answering the allegations contained in Paragraph V of said Amended Bill, defendant denies each and every allegation therein contained and the whole thereof.

VI.

Answering the allegations contained in Paragraph VI of said Amended Bill, defendant admits that he has, now is, and expects to continue to use in certain portions of the district of Oregon a paper excelsior machine for the purpose of manufacturing paper excelsior, which machine manufactures the same by severing or tearing sheets of paper into relatively narrow strips and separating said strips more or less and piling them in a haphazard fashion; admits that he has, does and will continue to

operate said excelsior machine without license or permission of plaintiff herein, and save as just admitted, defendant denies each and every allegation contained in said paragraph and the whole thereof.

VII.

Answering the allegations contained in Paragraph VII of said Amended Bill, defendant admits that plaintiff has notified him that his (defendant's) said paper excelsior machine infringes upon the aforesaid Letters Patent and save as just admitted, defendant denies each and every allegation contained in said Paragraph VII and the whole thereof.

VIII.

Answering the allegations contained in Paragraph VIII of said [12] Amended Bill, defendant denies each and every allegation therein set forth and the whole thereof.

IX.

Answering the allegations contained in Paragraph IX, defendant admits that said patent was adjudicated in that certain suit in the United States District Court for the Northern District of California, Southern Division, wherein Louie J. Antonsen (plaintiff herein) was plaintiff and Joseph Scherman was defendant, and said patent was also litigated in that certain cause in the United States District Court for the Northern District of Ohio, Eastern Division, wherein plaintiff herein was plaintiff therein and the Winter Paper Stock Company, an Ohio corporation, was defendant; further admits plaintiff is ready to produce, as this Honorable Court may direct, authenticated copies of said decrees and of the opinions of the mentioned Courts respectively accompanying the same. And as to each and all allegations in said paragraph contained other than those

specifically hereinbefore admitted, defendant denies the same and the whole thereof.

X.

Answering the allegations contained in Paragraph X of said amended Bill, defendant admits that he expects to and will continue to operate his said paper excelsior machine unless restrained by order of this Honorable Court, and save as just admitted, defendant denies each and every allegation in said paragraph contained and the whole thereof.

AND FOR A FURTHER DEFENSE to said Amended Bill of Complaint, your defendant respectfully alleges and shows as follows:

I.

That Louie J. Antonsen, plaintiff herein, was not the original and first inventor or discoverer of any material and substantial part of the thing patented as shown by said Patent 1,731,967, and/or [13] of the paper excelsior machine now used and intended to be used hereafter by defendant, which said paper excelsior machine is the machine referred to by plaintiff in his said Amended Bill of Complaint in Paragraph VI thereof.

II.

That in truth and in fact, Claude C. Rafter of Seattle, Washington was and is the original and first inventor of any material and substantial part of the machine disclosed or any material part of the machine and operation thereof purportedly patented by said Patent N. 1,731,967 and/or of the said machine now used and to be used by defendant. That said Claude C. Rafter did conceive and invent said machine on or about the 15th day of March, 1923 and made first drawings of said invention on or about the 1st day of April, 1923 and at about said date made

the first written description of said invention and on about the 20th day of March, 1923 first explained the invention to others, and about the 1st day of September, 1923 first embodied his invention in a full-sized machine and reduced the same to successful practice and operation, all of which occurred in the City of Seattle, County of King, State of Washington, and that said machine so invented, as well as additional machines of like kind and character, one of which is the machine owned and operated by defendant herein, have been continuously and successfully operated from on or about the 1st day of September, 1923 until the date hereof; that said Rafter made application for Letters Patent of the United States on said machine, which application was filed in the United States Patent office on January 21, 1924 under serial No. 687,488, which said application for Letters Patent has heretofore been abandoned and now is public property. That said Claude C. Rafter now resides in the City of Seattle, State of Washington, his particular address being 1402 West 62nd. That other witnesses having knowledge of said invention at said time and the facts detailed herein are T. E. Henderson, 2407 E. Jefferson Street, Seattle, Washington, [14] Claude E. Rafter, sone of said C. C. Rafter,, Seattle, Washington, E. G. Foster,, Seattle, Washington, and C. A. Wheeler, now residing at 781 Taggert Street, Portland, Oregon. That said paper excelsior machine used and operated by defendant, being the machine referred to in Paragraph VI of plaintiff's said Amended Bill, is a machine invented as aforesaid by said Rafter and by him built and by said Rafter sold to said C. A. Wheeler on or about February 15, 1924, which said machine was brought to the City of Portland, Oregon on or about the 11th day of July, 1924 and has been used in said city practically continu-

ously from said date, defendant acquiring ownership therein on or about the 19th day of March, 1929, and said machine has been operated by hiim continuously ever since and in its original form and construction, which said machine is mechanically identical with machine first constructed by said Rafter in 1923 as aforesaid. That said paper excelsior machine first conceived and invented by Rafter as aforesaid, as well as defendant's said paper excelsior machine constructed pursuant to said invention always made a feather edge excelsior, the paper being torn rather than cleanly cut and the strips separated and by said machine piled in a haphazard manner.

AND FOR A SECOND FURTHER ANSWER AND DEFENSE, defendant respectfully alleges and shows:

I.

That the plaintiff herein, alleged inventor, surreptitiously and/or unjustly obtained said patent No. 1,731,967, for that which was in fact invented by another, to-wit: C. C. Rafter of Seattle, Washington, who was using reasonable diligence in adopting and perfecting the same.

II.

Defendant adopts and re-alleges each and every allegation set forth in Paragraph II of his first further separate answer and [15] defense herein above stated as fully and as completely as though each and all of said allegations were hereat set forth haec verba.

III.

That plaintiff herein some time during the latter part of the year of 1923 or early in the year of 1924, the exact time being unknown to defendant, learned of the said excelsior machine

invented by said Rafter as aforesaid, one or a plurality of said machines at said time (year 1923 and 1924) being operated by said C. C. Rafter in the City of Seattle, State of Washington, said Rafter operating under the assumed name of Sunset Paper Excelsior Company with its place of business at about 6209 Fourteenth Ave. N. W. in the aforesaid city and inspected and examined said machine and the method of operation and the product produced, to-wit: feather edged paper excelsior piled in a haphazard manner; and had explained to him by said Rafter the details of said machine, its functions and the resultant product. That after gaining such knowledge and information as aforesaid, said plaintiff did purchase from C. C. Rafter his paper excelsior manufacturing business as aforesaid in the City of Seattle, Washington, and his equipment thereunto appertaining, including one of said paper excelsior machines, said machine having been invented and caused to be built by said Rafter, all as aforesaid, and being identical with the machine now owned and operated by defendant herein, being the machine mentioned in said Paragraph VI of plaintiff's Amended Bill of Complaint. That said Antonsen did not file application for the said Letters Patent until August 30, 1926 and he did intentionally and surreptitiously in his petition for said Letters Patent set forth, describe and claim the invention of said Rafter, well knowing that the machine claimed by him in his patent had been invented by said Rafter and that said plaintiff herein and in truth and in fact pirated all his ideas and conception from said Rafter, personally conceived of and invented nothing original but fraudulently and intentionally represented by his said application [16] to have invented the paper excelsior machine as set forth in said application.

AND AS A THIRD FURTHER SEPARATE ANSWER AND DEFENSE, defendant respectfully alleges and shows:

I.

That the invention claimed by said plaintiff herein by virtue of United States Letters Patent No. 1,731,967 was described in a printed publication prior to plaintiff's supposed invention or discovery thereof and long prior to his application for said Letters Patent. That said description and publication was made in the Seattle Daily Times, a newspaper then, continuously since then and now existing and being in the City of Seattle, State of Washington, and was so published and described in the Magazine Section of said paper in its issue of March 29, 1925 and that at the time of publication aforesaid, said newspaper had a great and extensive circulation, the exact circulation being to defendant unknown, but defendant is informed, believes and alleges that the circulation of said paper at said time was far in excess of 10,000 copies of general circulation and circulated intensively in the State of Washington and more or less generally through the United States and elsewhere. That said publication described said machine, its function, the product by it produced and how produced and contained pictures of said machine showing generally its construction, manner of operation and nature of its product and from the contents of said publication and the pictures thereof, one reasonably skilled in the art could from the information there given construct said paper excelsior machine and that said publication was made with the consent and knowledge of said L. J. Antonsen who was then and there in charge of the plant, operating said machine in said article described and pictured and then and there had knowledge that said article set forth that C. C. Rafter was the inventor thereof, and knowingly

permitted the same to be published, [17] acquiesced therein and thereto.

AND FOR A FOURTH FURTHER SEPARATE ANSWER AND DEFENSE, defendant alleges and shows:

I.

That the alleged invention of plaintiff herein as disclosed in United States Letters Patent No. 1,731,967 and the paper excelsior machine heretofore, now and to be used by defendant, being the paper excelsior machine referred to in Paragraph VI of plaintiff's said Amended Bill of Complaint, has been in public use and/or on sale in this country for more than two years preceding plaintiff's application for the aforesaid Letters Patent, and the same has been abandoned to the public.

II.

Defendant adopts each and every allegation set forth in Paragraph II of his First further separate answer and defense herein as fully and completely as though each and all of said allegations therein were set forth herein hereat haec verba.

III.

That the machine used by defendant, being the machine referred to as infringing plaintiff's said United States Letters Patent, was sold by said C. C. Rafter in the City of Seattle, Washington to C. A. Wheeler, now of the City of Portland, Oregon, on or about February 15, 1924 and said machine has been publicly used ever since. The address of said Rafter is 1402 West 62nd, and the address of said Wheeler is 781 Taggart Street, Portland, Oregon. That an identical machine was publicly used in the City of Seattle, State of Washington by said C. C. Rafter from on about September of 1923 and was operated

by said Rafter, doing business under the assumed name of Sunset Paper Excelsior Company, with its place in the aforesaid city at about 6209 Fourteenth Ave., Seattle, Washington. That paper excelsior manufactured by said machine was [18] sold to Wm. Rainwater, 1327 Rainier Ave., Seattle, Washington by said Rafter, doing business as aforesaid, in May of 1924 and subsequent thereto; and it was sold to Schwabacher Bros. & Co., Inc., of Seattle, Washington in the year 1924 and as defendant is informed, believes and therefore alleges, prior to the 30th day of August of said year; and it was sold to National Grocery Co. of Seattle, Washington, prior to the 30th day of August, 1924 and it was sold as early as the latter part of 1923 to G. H. Thompson, Inc., of Seattle, Washington, now operating as the Candy House of Seattle, Washington, and it was also sold during the year of 1924, and as defendant is informed, and believes and therefore alleges prior to August 30th of said year to Seattle Hardware Company of Seattle, Washington, and that each and all of the above named users used said product more or less extensively subsequent to the initial purchase thereof as hereinbefore set forth, continuously thereafter and that said product was manufactured by said paper excelsior machine invented by Rafter, as aforesaid; that on or about the 1st day of June, 1924 and long prior to the 30th day of August, 1924, said C. C. Rafter of Seattle, Washington, inventor of said paper excelsior machine then and there operating under the name of Sunset Paper Excelsior Company, with its place of business at 6209 Fourteenth Ave., N. W. in said city, sold said business to plaintiff herein who purchased of said Rafter said business and the purchase thereof included one of said paper excelsior machines invented by Rafter, said machine being identical with the machine now

operated by defendant, which is by plaintiff claimed to infringe his said United States Letters Patent. That said Rafter from the date he embodied his said invention in a full-sized machine and successfully operated the same, being on or about and not later than the 15th day of November, 1923, offered the same for sale in this country to the members of the public thereof and had the same in public use; that in addition to the sales hereinbefore specifi- [19] cally described, said Rafter between February, 1924 and July of 1926 built and sold six additional of said machines for use in the following cities, to-wit: San Francisco and Los Angeles in California; Chicago, Illinois; Boston, Mass.; Kansas City, Missouri; and Detroit, Michigan. That said Rafter has knowledge and information concerning said sales. That the machine purchased for use in San Francisco was purchased by one John C. Calhoun, whose present address to this defendant is unknown, the date of purchase being on or about March 15, 1924, and that T. E. Henderson was a partner of said Calhoun and the address of said Henderson is 2407 E. Jefferson Street, Seattle, Washington, and he has knowledge of that transaction. That as respects the machine purchased for use in Boston, Mass., the same was purchased on contract on March 17, 1924 by E. G. Foster, who presently lives in Seattle, Washington, his more accurate address being to this defendant presently unknown, but said Foster is known to plaintiff herein. That said Foster re-sold said machine to Louie J. Antonsen, plaintiff herein, in the City of Seattle, Washington, in the year 1924, the exact date being to plaintiff unknown. That as respects the sales of said machines in the other cities, defendant has no more particular information than hereinbefore set forth.

AND FOR A FIFTH FURTHER SEPARATE ANSWER AND DEFENSE, and by way of counter claim and cross bill against said plaintiff, defendant alleges:

I.

Adopts and re-alleges each and every separate and unrepeatd allegation set forth in his First, Second, Third and Fourth Further Answers and Defenses hereinbefore stated as fully and completely as though set forth herein hereat haec verba. [20]

II.

That as hereinbefore set forth by said adopted allegations, said C. C. Rafter sold to said C. A. Wheeler, who did purchase of said Rafter on or about February 15, 1924, one of said paper excelsior machines so invented by said Rafter under and by virtue of an agreement, of which Exhibit "A" attached hereto and specifically made part and parcel hereof as though set forth in full herein haec verba is a true and correct copy; that said Wheeler installed and operated said machine in the City of Portland, Oregon and thereafter and on or about the 19th day of March, 1929, defendant herein and his sister Hattie M. Hedrick purchased of said Wheeler who did sell to said parties said machine and all his right, title and interest secured by said Wheeler under and pursuant to the terms of the aforesaid agreement, Exhibit "A" being a true and correct copy thereof; that thereafter defendant and his said sister as copartners operated said machine in the City of Portland, Oregon pursuant to the rights so secured by them until the 30th day of March, 1931, at which time the sister of defendant herein died and shortly thereafter defendant herein duly and regularly purchased all her right, title and interest and ever since said time has been and now is operating said machine and making paper

excelsior and vending the same in accordance and pursuant to the aforesaid agreement and doing business as a sole trader under the name and style of Paper Excelsior and Pad Co.

III.

That prior to, at, and continuously since the purchase by said plaintiff herein of the paper excelsior business of said Claude C. Rafter in the City of Seattle, Washington, which said purchase was made as herein set forth by the adopted allegations on or about the 1st day of June, 1924, plaintiff had full knowledge of the said ownership and rights of said Wheeler and of defendant herein, and [21] defendant is informed and believes and therefore alleges that at the time the said plaintiff made his aforesaid purchase of and from said Rafter, he specifically agreed and contracted not to operate said machine or vend or sell the products thereof in territory acquired by defendant in the manner and way aforesaid, which said covenant was required by vendor Rafter for the use and benefit of the owners of the rights acquired under the contract, of which Exhibit "A" is a true copy thereof and that such restriction was a condition of the sale made by said Rafter to plaintiff herein and part consideration therefor.

IV.

That notwithstanding, plaintiff did vend and sell said paper excelsior in the territory described in said Exhibit "A" and that plaintiff, well and truly knowing each and all of the facts hereinbefore set forth, did intentionally and maliciously, for the purpose of harming, injuring and destroying the business of defendant, vend and sell said products within the territory aforesaid, and did advertise, publish and declare with like purpose and intentionally and maliciously that defendant herein had no

right to operate his said machine and vend the products thereof and did so notify and advise customers of defendant, both actual and potential and did declare and threaten that he would sue the defendant herein and his said customers either in law or equity for violations of his aforesaid Letters Patent, all of which was done maliciously and for the purpose and with the intention of harming and destroying defendant's business, which in large measure it has done.

V.

That the acts aforesaid of the plaintiff greatly injured defendant in his said business and that customers and prospective customers of defendant were deterred from buying his product and patronizing his business in fear that they would be sued and subjected to expense and [22] annoyance and said acts and conduct hampered and harassed and curtailed the business of the defendant and required large portions of his time in order to attempt to quiet said accusations so circulated by plaintiff, and that defendant has been actually damaged by the acts and conduct of said plaintiff in his said business in the amount of \$5,000.00; and that the acts of the plaintiff have been so flagrantly, intentional and malicious that defendant ought to be awarded punitive damages in an amount of not less than \$10,000.00 and that plaintiff has threatened to and will continue to make such threats to the customers of defendant and to the trade at large and to defendant and will continue to harrass and annoy the defendant and obstruct and interfere with his said business unless restrained by order of this Honorable Court.

WHEREFORE, defendant having fully replied to the said amended Bill of Complaint of plaintiff prays for a decree as follows:

(1) For a decree dismissing with prejudice the suit of the plaintiff herein and decreeing void the aforesaid Letters Patent.

(2) For judgment against the plaintiff in the sum of \$5,000.00 and the further sum of \$10,000.00 as punitive damages.

(3) That an injunction be granted to the defendant against the plaintiff herein enjoining and restraining said plaintiff, his agents, servants, employees or any one claiming by, through or under him or associated with him from orally, in writing or otherwise, declaring, publishing, and/or intimating that defendant has no lawful right to operate his aforesaid paper excelsior machine or vend the product thereof and/or threatening defendant with legal prosecution or suits or actions if he operates said paper excelsior machine and sells the products thereof, and/or threatening the customers of the defendant, actual or potential, or any members of the public, with prosecution if they or either of them should deal with or purchase of the defendant herein said paper excelsior;

(4) That defendant have judgment against the plaintiff for his costs and disbursements herein.

(5) That generally defendant have such other, further and/or [23] different relief as to this court may seem under the circumstances of this case meet, equitable and just.

(Signed) C. C. HEDRICK

Defendant.

(Signed) C. O. FENLASON

Solicitor and Counsel for Defendant.

[Endorsed]: Filed November 25, 1932. [24]

AND AFTERWARDS, to wit, on the 8th day of December, 1932, there was duly filed in said Court, a Reply, which omitting verification, is in words and figures as follows, to wit: [25]

[Title of Court and Cause.]

REPLY.

COMES NOW plaintiff and for his reply to the counter-claim set up by the defendant in his answer states as follows:

I.

Specifically denies each and every allegation contained in paragraph I of defendant's first further defense.

II.

Replying to paragraph II, plaintiff denies that Claude C. Rafter was the original or first inventor of the machine or any part thereof described in or covered by patent #1,731,967, and denies that said Claude C. Rafter was the inventor of the machine now used or operated by the defendant herein. Admits that on or about March 15, 1923, Claude C. Rafter did attempt to invent a machine for the purpose of making cut paper excelsior, and made drawings of said machine and built a machine for said purpose, and did manufacture cut paper excelsior in the city of Seattle, Washington, but specifically denies that the machine so built by said Rafter and/or any machine or machines of like character have been either continuously or successfully operated as alleged in said paragraph II or at all. Admits that Rafter made application for Letters Patent of the United States on a machine for manufacturing cut paper excelsior and that said application was made in January 1924. On information and belief plaintiff denies that said application has been abandoned and denies that said application either described or covered the invention embodied in plaintiff's patent #1,731,967. Denies that the paper excelsior machine used and/or operated by defendant, being the machine referred to in paragraph VI of plaintiff's amended bill, is a machine in-

vented by Rafter or is a machine built by him, and denies that said machine now is in its original form and/or construction, and in this connection alleges that the machine now used and operated by defendant has been mechanically changed in a manner so as to manufacture torn paper excelsior instead of cut paper excelsior, and has been so changed as to now embody plaintiff's said invention. Plaintiff specifically denies that the paper excelsior manufacturing machine claimed to have been invented by said Rafter made torn paper excelsior or paper excelsior with a feather-edge, and denies that the machine now used by defendant made either torn paper excelsior or paper excelsior with a feather-edge until after the defendant had mechanically changed said machine so as to embody plaintiff's invention.

III.

Plaintiff specifically denies each and every allegation contained in paragraph I of defendant's SECOND further answer and defense.

IV.

Replying to paragraph III of said second further answer and defense, plaintiff specifically denies each and every allegation therein contained, excepting that plaintiff admits that he purchased from Claude C. Rafter his paper excelsior manufacturing business in Seattle, Washington, including certain equipment, and [27] including a paper excelsior machine which had been built by said Rafter, but alleges that said machine so purchased from said Rafter did not make and was not adapted to make torn paper excelsior, but did make and was only adapted to make cut paper excelsior, and that said machine was not in any way the mechanical equivalent of the machine invented by plaintiff and embodied in plaintiff's patent. Admits that plain-

tiff filed his application for Letters Patent on August 30, 1926, but specifically denies that in his said application or petition for Letters Patent plaintiff set forth or described or claimed any invention made by said Rafter, and plaintiff specifically denies that in his application for patent he set forth or described or claimed any invention or any machine invented by said Rafter. Plaintiff specifically denies that the machine covered by his patent had been invented by said Rafter or any other person. Plaintiff specifically denies that he obtained any idea or conception from said Rafter of the machine invented by plaintiff, and alleges that plaintiff is the sole and original inventor of the machine embodied in his patent and of the method of manufacturing torn paper excelsior as set forth in his patent.

V.

Replying to paragraph I of defendant's THIRD separate answer and defense, plaintiff admits that the Seattle Daily Times is a newspaper published in the City of Seattle, Washington, and was so published in March 1925; admits that said newspaper has an extensive circulation. Denies that the invention embodied in plaintiff's patent, at issue in this cause, was described in any issue of said Seattle Times, and excepting as herein admitted plaintiff specifically denies each and every allegation contained in said paragraph I. [28]

VI.

Denies each and every allegation contained in paragraph I of plaintiff's FOURTH separate answer and defense.

VII.

Replying to paragraph II, upon information and belief plaintiff admits that said Claude C. Rafter sold a machine to C. A. Wheeler of Portland, Oregon; admits that a like machine was

used by said Claude C. Rafter in Seattle, Washington, from about September 1923, was operated by said Rafter doing business under the assumed name of Sunset Paper Excelsior Company with its place of business at 6209-14th Avenue, Seattle, Washington; admits that plaintiff purchased from said Claude C. Rafter the paper excelsior business of said Rafter, including a paper excelsior machine built by said Rafter. Specifically denies that said machine is identical with the machine now operated by the defendant, and alleges the fact to be that said machine is mechanically different from the machine covered by plaintiff's patent. Admits that said Rafter offered the excelsior machine built by him for sale to the public. Excepting as admitted in this paragraph, plaintiff alleges that he has not sufficient information or knowledge to form a belief as to any other allegation in said paragraph III, and therefore excepting as admitted specifically denies each and every allegation of said paragraph III.

VIII.

Upon information and belief plaintiff admits the allegations contained in paragraph II of defendant's FIFTH separate answer and counter-claim, except that this plaintiff specifically denies that the machine now used by defendant in making paper excelsior is mechanically the same as when built by said Claude C. Rafter, and in this connection alleges that since plaintiff's in- [29] vention embodied in plaintiff's patent, said machine has been mechanically changed so as to manufacture torn paper excelsior in place of cut paper excelsior; that when said machine was first built it was not adapted to make torn paper excelsior but did make cut paper excelsior, and said machine as now used and operated by defendant is mechanically different from the machine which was built by said Rafter.

IX.

Replying to paragraph III thereof, plaintiff admits that he had knowledge that said Wheeler had purchased a paper excelsior machine adapted solely to the manufacture of cut paper excelsior from said Rafter, with the understanding that said Wheeler should have the exclusive right to sell cut paper excelsior manufactured by said machine in Portland and vicinity. Plaintiff admits that at the time he acquired said machine from Rafter he agreed not to sell any of the cut paper excelsior made by said machine in territory outside of Seattle and vicinity; however, said agreement not to sell cut paper excelsior outside of Seattle and vicinity was made relying upon the representation of said Rafter that he had pending in Washington an application for a valid patent upon the machine so purchased by plaintiff and that he would secure a valid patent upon said machine, but said Rafter never secured any patent upon said machine. Plaintiff specifically denies that he has ever sold any cut paper excelsior manufactured by said machine or otherwise in Oregon. Excepting as admitted herein, plaintiff specifically denies each and every allegation contained in said paragraph III.

X.

Replying to paragraph IV, plaintiff admits that he informed the defendant that defendant was infringing plaintiff's [30] patent by using and operating his machine and by making and selling torn paper excelsior which defendant did make according to the method described in plaintiff's patent in issue. Plaintiff also admits that his salesman in Portland, Oregon, informed the public and certain purchasers of the paper excelsior that plaintiff had a valid patent covering the machine therein described and covering the method of making paper excelsior by tearing the same into narrow strips and separating and pil-

ing them in haphazard fashion. Otherwise this plaintiff denies each and every allegation contained in said paragraph IV.

XI.

Plaintiff denies each and every allegation contained in paragraph V of said counter-claim.

WHEREFORE, plaintiff denies that defendant is entitled to the relief prayed for in his answer, and prays that this plaintiff may have the relief prayed for in his complaint, with costs and disbursements.

LOUIE J. ANTONSEN

Plaintiff.

J. P. WINTER

NORMAL KUYKENDALL

Solicitors and Counsel for Plaintiff.

[Endorsed]: Filed December 3, 1932. [31]

AND to wit, on the 9th day of May, 1936, there was duly filed in said Court, nunc pro tunc as of and for April 29, 1935, an Opinion, in words and figures as follows, to wit: [32]

[Title of Court and Cause.]

OPINION.

JAMES ALGER FEE, District Judge:

Plaintiff is the owner of Patent No. 1,731,967. The application for this patent was filed on August 30, 1926, and patent was granted to plaintiff on October 15, 1929. The patent covers improvements in machines for manufacturing paper excelsior, and also a process to make paper excelsior by tearing it.

This suit is based upon machine claims 1 and 2 and upon process claim 7. The patent was upheld as valid by the District

Court of California in the case of Antonsen vs. Jos. Scherman, and was upheld by the District Court for the Northern District of Ohio, Eastern Division, in the case of Antonsen and American Excelsior Co. vs. Winter Paper Stock Company. In the California case the United States Court held claims 1, 2 and 7 valid, and the Ohio Court held machine claim 2 and 7 and other machine claims valid. In these cases the defense of anticipation by prior use was not pleaded and, therefore, the holdings of the courts in those cases cannot assist this court in determining that question.

The principal issue in this case under the pleadings, is, has the defense of lack of novelty been established by that degree of proof required by law. [33]

Antonsen has been issued a patent by disclosure of the essential features made by him in the United States, February 1925. This grant carries with it a strong presumption of validity. In view of the fact that paper excelsior is a present commercial necessity and of the fact that patentability of the device has been decided favorably by two other federal courts, there seems to be little ground for contention as to those features. But the chief defense in this case, is lack of novelty, which has never been previously litigated, in respect to this particular process or machine. The burden of proof to establish lack of novelty lies upon the defendant and in the ordinary instance he is required by many courts to establish this issue by evidence beyond a reasonable doubt.

However, the rule as to weight of the requisite evidence is somewhat relaxed where anticipation is probable, *Lee vs. Upson & Hart Co.* 43 Fed. 670; *Walker on Patents* par. 116 n. 96 and where the evidence of prior attainment of the result consists not only of oral testimony but of documents and things which

tend to establish this conclusion. See Barbed Wire Patent 143 U. S. 284; Deering vs. Harvester Works 155 U. S. 300; Walker on Patents par. 116 n. 101. This rule is applicable to the case at bar.

There has been exhibited a machine made originally by one, Rafter, sometime in 1923 which produces a paper excelsior of the same quality as that manufactured by defendant. This is the alleged infringing device. It has been in continuous operation ever since it was sold by Rafter in 1924. The presumption is that the defendant's machine operates now as it did when originally constructed. If so, lack of novelty, in the Antonsen device is established because the testimony is clear that he did not build a paper tearing machine until after he had purchased Rafter's original outfit and until after defendant's machine had been sold by Rafter to defendant's predecessor in interest. It is contended that this presumption [34] has been rebutted by the physical condition of the defendant's machine.

The Hedrick machine shows that the disks are not all in facial contact and it is claimed that the changes from the original machine have been introduced after the discovery by Antonsen. This is, of course, a possibility but the weight of the evidence is against such a conclusion. As will hereafter be shown the Rafter machines tended to vary from the specifications of the patent application.

The testimony of C. A. Wheeler who purchased the Hedrick machine from Rafter and operated it until 1929 must be given great weight. He swears it has always produced excelsior similar in quality to that which it now brings forth. He introduced excelsior from the interstices between the rafters of a building formerly occupied by him which he testifies was placed there in the winter of 1924-5. While this may not be entirely accu-

rate, the court is convinced that these samples are quite old and that it is thereby demonstrated that the Hederick machine was producing this type of excelsior very early. Many witnesses who had some opportunity for observation testify that the product has always been the same.

This conclusion might well settle the case but the court likewise considered the history of the original Rafter machine. The testimony of Rafter himself has been entirely disregarded except where corroborated since he has been discredited by the character of his testimony. Of course, this feature is not entirely controlling, since the other evidence establishes the facts. *Olin vs. Timken* 155 U. S. 152; *Timken vs. Olin* 37 Fed. 207; *Walker on Patents* par. 116 n. 99.

As the court reconstructs the situation from the evidence, Rafter lost an opportunity. Prior to the time of his original conception, all paper excelsior was the result of cutting machines, and had straight edges. The process by which it was produced was slow [35] and if quantity production was attempted the result was a stoppage. Rafter designed a cutting machine with the edges of the disks in facial contact. But he included in his application two specifications which looked toward quantity production, but which negatived almost entirely his original plan. These were the spring which allowed the disks to draw out of a facial contact and the means for readjusting the disks in their relation to each other.

There was not exhibited any machine in which the faces of the disks were now in facial contact. The testimony shows that such a result could only have been attained by the most careful workmanship throughout the device and absolutely precise machine work upon the disks themselves. It was likewise made clear, that in the machines constructed by him, the disks actually

did not so contact each other. This point is hotly contested by the parties but is of no particular value since all the evidence shows that under certain circumstances the devices constructed by Rafter, did operate while these disks did not have the cutting edges in contact.

Whether by design or by careless construction Rafter's original exemplifications of the device did not fulfill his anticipations. The machine would cut paper with straight edges only if the sheets were fed a few at a time and no great speed was attained. Dull as the disks are upon the Hederick machine, it will cut a sheet or two of trick glazed magazine paper today in this manner and produce straight edges upon the strips. The original Rafter machine was operated by hand and the action of the spring was thus not brought into play. The Foster machine, built by Rafter, which was operated by hand power was exhibited by Antonsen to his attorney to illustrate the idea that the Rafter machines only cut paper. But if he had so operated it as to bring the spring into play by overcrowding, the result would have been different.

The experts for plaintiff testify that the Rafter machine [36] could not produce torn excelsior for the reason that it would jam as soon as it failed to cut the paper. The court rejects this conclusion in the face of the direct evidence that it did not jam under such circumstances and the direct evidence drawn from the actual operation of the defendant's machine.

Whether the Rafter machines were constructed according to design or not they were subject to deviation therefrom as a result of use. The dulling or chipping of the cutting edges of the disks, the weakening of the spring, or the shifting in alignment of the disks themselves due to a failure to keep the nuts tight, or due to the difference in the thickness of the

washers between them alike would change the essential character of the operation and of the product.

But the two most important factors which changed Rafter's device into a tearing machine were the application of power and the cutting of newsprint. The motor was added in August 1923. From that time it was difficult to make excelsior with straight edges. The speed had to be cut down and thick glazed paper cut in order to attain this result. From the construction of a sheet of newsprint one can readily discern that producing a straight edge on strips cut therefrom is a difficult matter on any device. These inferences from the nature of the operation are fully supported in the testimony.

The article in the Seattle paper and the enlargements of the pictures taken of the Rafter machine are cited as evidence to the contrary. But it is clearly shown there that the product fell haphazard, and that the edges were intermeshed and the mass resilient. Some of the strips moreover show roughened edges under the microscope. The use of the expressions "torrent" of strips pouring from the machine and "cascading" onto the floor below, are typical of the defendant's machine and convince the court that if the Rafter machine were operated at that rate of speed, the result [37] was shredded paper strips. The reference to cutting of magazines indicates that even at that late date the cutting of straight edged glazed paper was still followed, but it has no weight to prove that the device produced no other product.

It is a proper deduction from all of these circumstances, that Rafter intended at first to produce excelsior with a straight edge, but owing to the inherent nature of his machine as set out in the application and his desire for quantity production, he actually made torn excelsior.

As the record is reviewed it seems clear that he was entitled to a patent. But the application did not describe this product specifically. It is questionable as to whether this arose from confusion in his own mind or from failure to appreciate the qualities of the torn product or from failure to explain his machine with precision to his attorneys.

There can be no doubt that from the outset of the use of power on the Rafter machine, under various circumstances, the cutting disks moved over into the same relative position as that in which the disks on the Antonsen machine are fixed. While in that position these disks performed exactly the same function which those on the Antonsen machine do now and the same result was produced as is now obtained by Antonsen's device. When two devices however different in form perform the same functions by virtue of similar elements, for the purposes of the patent law, the devices are themselves identical.

Antonsen performed two services. He stabilized the disks in the position which they attained in the Rafter machine when operated at high speed and overcrowded. This was a mere mechanical operation. Second, he hired a patent attorney who clearly and correctly described the operation.

Rafter seems not to have appreciated the commercial de- [38] mand which would result for the manufacture of torn excelsior. But he did make it and manufacture machines which produced it in the hands of others, and thereby created a new industry. He sold the product to the public and operated the device successfully in a public manner. When he abandoned the patent application, this invention became the property of the public and Antonsen is not entitled to monopolize it.

The feature of sale to the public and notorious use of the device distinguish this state of fact from cases where a by-

product has been made, the use of which is unappreciated. See *Boyd vs. Cherry* 50 Fed. 279, 283. Likewise it is differentiated from a case where certain phases of a process of reducing ore had been used without appreciation prior to an application for patent therefore. *Carson vs. American Smelting & Refinery Co.* 11 Fed. (2d) 766. If the use of these portions of the process had been reflected in the product, the cases would be similar. In the instant case, it was, torn excelsior was manufactured and sold. In the case cited, the metal which was smelted from the ore was just the same no matter how the result was accomplished.

Antonsen's actions are entirely convincing to the court if other proof were lacking. He had old newspapers to dispose of and came to inspect the Rafter's machine. He became convinced that it was the device he desired and at the same time discovered that Rafter did not entirely know the full potentialities of the product. He said at this time that Rafter had "a gold mine and doesn't know it". He purchased the machine for Three Thousand (\$3,000.00) Dollars, together with other things of slight value. He bought up other machines made by Rafter apparently with the idea of putting them out of circulation. He then studied for some plausible differentiation and finally adopted the solidly fixed disks with uniform separation. This was an improvement over the original Rafter [39] machine but was only such as a trained mechanic would make, once he saw torn excelsior made and conceived its further manufacture with less difficulty desirable.

Antonsen brought other suits to establish the validity of the patent in localities where the defense of lack of novelty would probably not be raised. His negotiations with the Hedricks indicate that he was none too sure of his ground. Furthermore, of all persons who saw the Rafter machine in operation

when driven by power, Antonsen and two persons who have been employed by him for many years are the only ones who testify that the Rafter machine did not produce torn excelsior.

Antonsen's actions over the course of years and his manner upon the witness stand convince the court beyond a reasonable doubt that so far as he was concerned, there was no novelty in the machine produced by him of which the public had not already had the advantage. See *Atlantic Works vs. Brady* 107 U. S. 192.

The bill is dismissed and the patent declared void for lack of novelty.

[Endorsed]: Filed May 9, 1936, nunc pro tunc as of and for April 29, 1935. [40]

AND AFTERWARDS, to-wit, on the 14th day of November, 1935, there was duly filed in said Court, Exceptions to Proposed Findings in words and figures as follows, to wit: [41]

[Title of Court and Cause.]

EXCEPTIONS TO PROPOSED FINDINGS.

Comes now the Plaintiff, by his solicitors, and excepts to the proposed Findings of Fact in the above entitled court and cause as follows, to-wit:

I.

Excepts to Paragraph IV, and to each and every part thereof, for the reason and upon the ground that the same is not based upon any competent testimony and is contrary to the evidence.

II.

Excepts to that portion of Paragraph V of said Findings which are to the effect that Claude C. Rafter was the original and first inventor of any material and substantial part of the

machine disclosed, or its operation or the processes disclosed, patented by Patent No. 1,731,967, in so far as anything was invented over the state of art as it existed prior to the time Rafter made his invention, as in these findings hereinafter set forth, on the grounds and for the reason that the same is not based upon any competent testimony adduced at the trial, and is contrary to the evidence, and further excepts to that portion of Paragraph V of said Findings that said Rafter did first conceive of a machine for the making of paper excelsior in about the month of June, 1923, and in the month of August, 1923, embodied his invention in a full size machine operated by power, and reduced the same to successful practice and operation, and that said machine so invented, as well as additional machines of like kind [42] and character, one of which is operated by the Defendant herein, have been continuously and successfully operated, on the grounds and for the reason that the same is not based upon any competent testimony adduced at the trial, and is contrary to the evidence.

(2) Excepts to that portion of Paragraph V of said Findings which purports to find that the machine invented and constructed by Rafter from the very inception of power use which occurred about August, 1923, continuously down to the date hereof, produced what is known as torn feather-edged excelsior, by passing paper material through a pair of parallel and oppositely rotated spindles each mounting a plurality of inter-meshing bevel edged discs, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

(3) Excepts to that part of Paragraph V which purports to find that a separation of the discs was a natural incident and quality of the machine, and that all of the machines produced

torn excelsior, and that there was a means disposed on the upper spindle namely, a nut, so that by turning the same, an adjustment could be made to effect a space relationship between the sets of intermeshing discs, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

(4) Excepts to that part of Paragraph V of the findings which purports to find that the Rafter machine, when power was applied in August, 1923, manufactured a torn paper excelsior by tearing sheets of paper stock into narrow strips, and discharging them from the machine, and piling them in haphazard fashion, and the strips were themselves more or less separated one from the other, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

(5) Excepts to that part of Paragraph V of the findings which purports to find it is very clear from the inception Rafter's machine operated successfully under power, and the paper excelsior produced was of great utility, liked by the trade, and that there is no substantial, if any, difference between the paper excelsior produced by Rafter on his earliest power machine, as well as others later built, and that which is now produced by Antonsen's alleged invented machine, or any other paper shredding machine, on the [43] grounds and for the reason that the same is speculative, not based upon any competent testimony, and is contrary to the evidence adduced at the trial.

(6) Excepts to that part of Paragraph V of the findings which purports to find that the evidence shows that in actual fact and practice the discs on the Rafter machines were adjusted so as not to be touching, but to have a degree of separa-

tion bearing from one-thirty second to one-sixteenth of an inch, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

III.

(1) Excepts to that part of Paragraph VI of the findings which purports to find that said Rafter invented a machine upon which letters patent could have been secured, that Rafter did not fully appreciate the commercial importance of his machine, and that in his patent application, through his own, or his attorney's oversight, or inadvertence, failed to claim what he was entitled to claim, and was disclosed invisible by the actual machines constructed by Rafter, on the grounds and for the reason that the same are not supported by the pleadings, and speculative argument, irrelevant and immaterial, are not proper findings of fact, are not based upon any competent testimony, and are contrary to the evidence.

(2) Excepts to that part of Paragraph VI of the Findings which purports to find that Rafter sold to the public not less than seven machines up to June 1, 1924, on the grounds and for the reason that the same is not based upon any competent testimony and is contrary to the evidence, and further excepts to that part of said paragraph which purports to find that Rafter's machine had been in public use and on sale in this country for more than two years prior to Plaintiff's application for letters patent, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

IV

(1) Excepts to that portion of Paragraph VII of the Findings which purports to find that Antonsen immediately perceived and appreciated what Rafter had invented, and the commercial

possibil- [44] ities and value of the same, and that he purchased the machine that cost Rafter about \$100.00 to build, for \$2900.00, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence, and is not supported by the pleadings, and further excepts to that portion of Paragraph VII which purports to find that Antonsen operated the machine purchased from Rafter for many years, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

(2) Excepts to that part of Paragraph VII of the Findings which purports to find that the machine bought by Antonsen from Rafter manufactured paper excelsior of a kind, and in the manner described in Claim 7 of Letters Patent No. 1,731,967, on the grounds and for the reason that the same is not based upon any competent testimony, and is contrary to the evidence.

(3) Excepts to that part of Paragraph VII of the findings which purports to find that the original prints and copy of the newspaper conclusively show that the Rafter machine manufactured paper excelsior by tearing and severing sheets of paper stock into narrow strips, separating said strips and piling them in haphazard fashion. That the prints show the paper excelsior piled in haphazard fashion and individual strips reveal rough feather edges, and that other excelsior machines manufactured by Rafter likewise produced torn feather edged excelsior, and separated the strips and piled the same in haphazard fashion. That the said prints and newspaper articles do not so show, and such finding is not based upon any competent testimony adduced at the trial, and is contrary to the evidence.

(4) Excepts to that portion of Paragraph VII of the findings which purports to find the discharging of paper excelsior in a haphazard fashion, with separation of the strips, was a natural and inherent attribute, quality and characteristic of Rafter's machines from the inception of power operation. That the contiguous intermeshing discs were not operated in facial contact, nor were they adjusted to so operate even without load. That Rafter did not construct his machine with precision, and without precision would be impossible to have the contiguous discs in facial contact, even [45] though desired, on the grounds and for the reason that the same are argumentative, not proper findings of fact, are not supported by the pleadings, are not based upon any competent testimony adduced at the trial, and are contrary to the evidence.

(5) Excepts to that part of Paragraph VII of the findings which purports to find that the Rafter machines from the time power was applied were adjusted to have a clearance between the surface sides of contiguous discs, that the separation was intentionally made by the parties, the means and manner of making such adjustment understood and appreciated by all coming in contact with the machines. That it was a small matter to adjust the machine to obtain the desired separation between the discs and a very simple matter for an ordinary mechanic to make the upper spindle of the Rafter machine fixedly mounted instead of yieldedly mounted in a longitudinal direction, and that various of the purchasers intentionally varied the degree of separation between the discs to produce rougher feather edged excelsior, on the grounds and for the reason that the same are argumentive, speculative, not proper findings of fact, are not supported by the pleadings, are not based on any competent testimony, and are contrary to the evidence.

V.

Excepts to that portion of Paragraph VIII of the findings which purports to find that Antonsen bought up various of the machines built and sold by Rafter, and further excepts to the entire remaining portion of said Paragraph VIII, on the grounds and for the reason that the said findings are, and each of them is, irrelevant and immaterial to any issue in this case, are not supported by the pleadings, are not proper findings of fact, are argumentive and speculative and conclusions of law, are not based upon any competent testimony, and are contrary to the evidence.

EXCEPTIONS TO PROPOSED CONCLUSIONS OF LAW.

I.

Plaintiff excepts to the proposed conclusions of law to the effect that the evidence produced by the Defendant is found clear, unequivocal and convincing, and establishes each and all of such [46] facts to the complete satisfaction of the Court, and has established the defenses, particularly alleged in his answer, and sustained every burden of proof by clear, unequivocal and convincing evidence that Plaintiff has invented nothing; that U. S. Letters Patent No. 1,731,967 issued to Plaintiff are void and of no force or virtue; that Plaintiff's bill of complaint should be dismissed; that the Defendant should have and recover his costs and disbursements from Plaintiff, for the reason and upon the ground that the same are, and each and every part thereof is contrary to law, not based upon any proper findings of fact, and contrary to the facts and evidence.

Respectfully submitted,

CLARENCE W. PIERCE,
NORMAL KUYKENDALL.

[Endorsed]: Filed November 14, 1935. [47]

AND AFTERWARDS, to-wit, on Friday, the 13th day of December, 1935, the same being the 32nd JUDICIAL day of the Regular November TERM of said Court; present the Honorable James Alger Fee, United States District Judge, presiding, the following proceedings were had in said cause, to-wit: [48]

[Title of Court and Cause.]

ORDER OVERRULING EXCEPTIONS TO FINDINGS
AND CONCLUSIONS.

This matter heard upon Plaintiff's objections and exceptions to defendant's proposed Findings of Fact and Conclusions of Law, and the court being fully advised.

IT IS ORDERED and ADJUDGED, that said objections and exceptions be and the same are hereby overruled and disallowed.

Done in open court, this 13th day of December, 1935.

JAMES ALGER FEE,
Judge.

[Endorsed]: Filed December 13, 1935. [49]

AND AFTERWARDS, to-wit, on the 7th day of June, 1935, there was duly filed in said Court, and entered on the records thereof, Findings of Fact and Conclusions of Law in words and figures as follows, to-wit: [50]

[Title of Court and Cause.]

FINDINGS OF FACT AND CONCLUSIONS OF LAW.

Now at this time the above entitled case comes on for final hearing, and the Court having read and considered the pleadings, having heard and considered all the evidence submitted at trial, and having taken the matter under advisement, and having considered the briefs presented by the respective parties in support of their respective contentions, and having rendered its decision in open court, and being now fully advised, makes the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT.

I.

That plaintiff, Louie J. Antonsen, was at the time of the filing of the complaint herein, a citizen of the United States and a resident of Seattle, County of King, State of Washington.

II.

That on October 15, 1929, pursuant to application theretofore made for the same, Letters Patent of the United States No. 1,731,967 issued to the plaintiff upon his application for a mechanical invention relating to a mechanical paper shredding machine and a process for manufacturing paper excelsior by means of said machine throughout the United States and the territories thereof.

III.

That plaintiff, Louie J. Antonsen, was, at the time of the filing of the complaint herein and prior thereto, the owner of said Letters Patent of the United States No. 1,731,967 and this is a suit in equity based on said Letters Patent. [51]

IV.

That Louie J. Antonsen, plaintiff herein, was not the original and first inventor or discoverer of any material and substantial part of the thing patented as shown by said Letters Patent No. 1,731,967.

V.

That Claude C. Rafter, of Seattle, Washington was the original and first inventor of any material and substantial part of the machine disclosed, or its operation or the processes disclosed, purportedly patented by said patent No. 1,731,967 insofar as anything was invented over the state of the art as it existed prior to the time Rafter made his invention as in these findings hereinafter set forth. That said Rafter did first conceive of a machine for the making of paper excelsior in about the month of June, 1923. That in about the month of August, 1923 said Rafter first embodied his invention in a full-sized machine operated by power and reduced the same to successful practice and operation, all of which events occurred in the city of Seattle, County of King, State of Washington, and that said machine so invented as well as additional machines of like kind and character, one of which is the machine owned and operated by the defendant herein, have been continuously and successfully operated. That the machine invented and constructed by Rafter from the very inception of power use, which occurred in about August or September of 1923, continuously down to the date hereof, produced what is known as torn feather edge excelsior, which was done by passing a newspaper or other like or suitable paper material, through a pair of parallel and oppositely rotated spindles each mounting a plurality of intermeshing bevel edge discs. Even if the bevel edge discs were adjusted to be in facial contact when the machine was fed with a few thicknesses of paper, four or upwards, there

would be a shifting of the upper discs so as to take the same out of touching facial contact with the lower discs. This separation was a natural incident and quality of the machine, and all of the machines produced torn excelsior. The shifting effect was due to the fact that the upper spindle was mounted so as to be yieldable in a longitudinal direction and there were means disposed on the upper spindle, namely: a nut, so that by turning the same an adjustment could be made to effect a space relationship between the sets of inter- [52] meshing discs. That the Rafter machine, when power was applied to it, which was done as early as August or September, 1923, manufactured paper excelsior by tearing the sheets of paper stock into narrow strips and discharging them from the machine and piling them in a haphazard fashion, and the strips were themselves more or less separated, one from the other. That before said Rafter's invention there were machines which did cut paper into strips. It is very clear that from the very inception, Rafter's machine operated successfully under power and the paper excelsior produced thereby was of great utility, liked by the trade, and there is no substantial, if any difference between the paper excelsior first produced by Rafter on his earliest power machine, as well as the others later built, and that which is now produced by Antonsen's alleged invented machine, or any other paper shredding machine. The evidence shows that in actual fact and practice the discs on the Rafter machines were so adjusted so as not to be touching but to have a degree of separation varying from approximately $1/32$ nd to $1/16$ th of an inch.

VI.

Said Rafter, in fact, invented a machine upon which United States letters patent could have been secured. Rafter did not fully appreciate the commercial importance of the machine which he constructed and invented. He made application for U. S.

letters patent and in his application, either through his own or his attorney's oversight or inadvertence, he failed to claim what he was entitled to claim, which, in fact, was disclosed and was visible by the actual machines constructed and used by Rafter, and also disclosed by and visible from the machines built by Ratfer and sold by him. Rafter sold to various members of the public, not less than seven of these machines up to June 1, 1924. That Rafter finally abandoned his application for U. S. letters patent. That said Rafter's machine had been in public use and on sale in this country for more than two years preceding plaintiff's application for U. S. letters patent.

VII.

That plaintiff first learned of Rafter's machine in the early part of January, 1924. At that time Rafter was actually operating his machine under power in production and was selling the product. At this time, among other [53] things, the plaintiff was engaged in the business of selling and dealing in old newspapers. On learning of the Rafter machine he inspected and examined the same. From the very beginning, Rafter's machine was open to the public for inspection, explained by Rafter to various visitors inspecting or looking at the same, and because of its novelty it attracted rather wide attention and was inspected by a great number of people even during 1923, and by many more during the early part of the year 1924. Antonsen immediately perceived and appreciated what Rafter had invented and likewise perceived and appreciated the commercial possibilities and value of the same. The plaintiff purchased the machine that Rafter was operating together with Rafter's paper excelsior business and a few other articles of personal property of little value and took delivery of the same on June 1, 1924. He paid Rafter for the

same \$2900.00. It cost Rafter only about \$100.00 to build the machine which he sold to Antonsen, the plaintiff. Antonsen operated the machine he so purchased from Rafter for many years, although he claims during the late years of use, he made some changes. The machine purchased by Antonsen from Rafter manufactured paper excelsior of a kind and in the manner described in Claim No. 7 of said United States Letters Patent No. 1,731,967 issued to Antonsen. During the year 1925 and at other times, there was published a newspaper in Seattle, State of Washington, known as the Seattle Daily Times, which said newspaper had a great and extensive circulation and had such on March 29, 1925. That during the month of March, 1925 the plaintiff was operating in the City of Seattle, under production, the paper excelsior machine which he had purchased from said Rafter, and the same was mechanically as purchased from said Rafter. That shortly prior to the 29th day of March, 1925, said newspaper took various photographs of said machine and the product, and in its issue of March 29, 1925 said newspaper published a general account about the machine and its product, which account was illustrated with various photographs taken by said newspaper as aforesaid. A copy of said article appears in evidence as do the various original prints. These prints conclusively show that said Rafter Machine manufactured paper excelsior by tearing and severing sheets of paper stock into narrow strips, separating said strips and piling them in a haphazard fashion. That the said prints show the paper excelsior piled in a haphazard manner, and individual strips reveal rough feathered edges. [54] The other paper excelsior machines contemporaneously manufactured and sold by Rafter, likewise produced torn feather-edged excelsior and separated the strips and piled the same in haphazard fashion. The discharging of the paper ex-

celsior in a haphazard fashion, together with the more-or-less separation of the strips, was a natural and inherent attribute, quality and characteristic of said Rafter's machines, from the very inception that the Rafter machines were operated under power. The contiguous intermeshing discs were not operated with the contiguous discs in facial contact nor were they adjusted to so operate even when being operated without load. Rafter did not construct his machine with great precision, and without precision it would have been impossible to have all of the contiguous discs in facial contact even though such was desired. In fact and in practice the said Rafter machines, from the time power was applied in the operation thereof, were adjusted so as to have a clearance or a separation between the surface sides of the contiguous discs, and this separation was intentionally made by the parties, the means and manner of making such adjustment understood and appreciated by all coming in contact with the machines. That it was a very small matter to adjust the machine so as to obtain the amount of desired separation between the surface edges of the contiguous intermeshing discs, and it was a very simple matter for any ordinary mechanic to make the upper spindle of the Rafter machine fixedly mounted instead of having it yieldedly mounted in a longitudinal direction, as constructed by Rafter. Various of the purchasers intentionally varied the degree of separation between the mentioned discs so as to produce rougher feather-edged excelsior if it were particularly desired.

VIII.

The plaintiff at all times knew of the machine being operated by the defendant, and he knew of the history of this machine; plaintiff knew this machine was sold by said Rafter to one C. A. Wheeler in about March of 1924; that it was shipped to Portland,

Oregon and installed by Wheeler some time in August, 1924, and that it has been in continuous operation ever since. Antonsen bought up one of the machines built and sold by Rafter, and in fact, tried to arrange for the purchase of the defendant's particular machine. Although plaintiff contends that the Rafter machine produced paper excelsior with smooth [55] paper edges, yet he did not produce a single sample of such paper excelsior, nor did he produce a single user of the excelsior manufactured by the Rafter machine, to support this claim. He failed to do this notwithstanding he himself had operated a Rafter machine for a number of years and sold its product quite extensively throughout the city of Seattle. The plaintiff, prior to bringing this suit, instituted several suits in various districts of the United States, claiming that his same letters patent had been infringed. He instituted these suits at points distantly removed from the loci of the invention and early development of the Rafter machine. This procedure on the part of the plaintiff, whether, in fact, *stragetical* or not, prevented the defendants from having or gaining ready or complete access to the early history of the Rafter machine and plaintiff's knowledge of, associations and dealings with such machine. The plaintiff intentionally and purposely adopted such a course of procedure. The issues tendered by the pleadings in this case were not tendered in any of the other litigation. The plaintiff appreciated that if the issues here presented were not tendered, he would have far better chances for his patent to be sustained, and he further appreciated that if his patent were sustained, it would, to some degree, bolster the validity of the same and he desired to have this backing before instituting litigation in a district where the early history and facts, as mentioned above, were more or less known and more accessible of ascertainment and determination.

IX.

That for a number of years defendant has been selling the paper excelsior produced on a Rafter machine, in and about the City of Portland, Oregon, and the plaintiff did notify and warn various of the users of defendant's said produce of the plaintiff's said patent and that the product being sold by defendant constituted an infringement on his said letters patent. The proof submitted by the defendant is not sufficient to establish any items of recoverable damages.

CONCLUSIONS OF LAW.

That the evidence produced by the defendant upon which the particular facts hereinabove found are based, is clear, unequivocal and convincing and [56] establishes each and all of such facts to the complete satisfaction of the court fully and completely; and the defendant has established the defenses particularly alleged in his answer and has sustained every burden of proof placed on him by clear, unequivocal and convincing evidence.

II.

The plaintiff invented nothing. Whatever rights to letters patent Claude C. Rafter may have had he abandoned and the same became public property.

III.

That said U. S. letters patent No. 1,731,967 so issued to the plaintiff, as above mentioned, are void and of no force or virtue.

IV.

That the plaintiff's bill of complaint should be dismissed.

V.

That defendant's counter-claim against the plaintiff should be dismissed.

VI.

That the defendant should have and recover of and from the plaintiff his costs and disbursements in this suit.

Done and dated at the City of Portland, State of Oregon, this 13th day of December, A. D. 1935.

JAMES ALGER FEE,

Judge.

[Endorsed]: Filed December 13, 1935. [57]

AND AFTERWARDS, to-wit, on Friday, the 13th day of December, 1935, the same being the 32nd JUDICIAL day of the Regular November TERM of said Court; present the Honorable James Alger Fee, United States District Judge, presiding, the following proceedings were had in said cause, to-wit: [58]

In the District Court of the United States for the
District of Oregon.

In Equity No. E-9311

LOUIE J. ANTONSEN,

Plaintiff,

vs.

C. C. HEDRICK, individually, and doing business under the
assumed name and style of PAPER EXCELSIOR &
PAD CO.,

Defendants.

DECREE.

Now at this time the above entitled suit comes on for final disposition, and the Court having read and considered the pleadings, having heard and considered all of the testimony and other

evidence introduced at the trial, and having taken the matter under advisement, and having considered the briefs submitted by the respective parties, and having rendered its oral opinion in open Court, and having heretofore made, entered and files its Findings of Fact and Conclusions of Law, and being now fully advised as to what judgment and decree should be made and entered on the issues joined in the pleadings,

IT IS HEREBY ORDERED, ADJUDGED AND DECREED that plaintiff's bill of complaint should be and the same is hereby dismissed;

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that defendant's counter-claim against the plaintiff be and hereby is dismissed;

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the defendant have and recover of and from the plaintiff his costs and disbursements in this case.

Done and dated at the City of Portland, State of Oregon, this 13 day of December, 1935.

JAMES ALGER FEE,
Judge.

[Endorsed]: Filed December 13, 1935. [59]

AND AFTERWARDS, to-wit, on the 14th day of December, 1935 there was duly filed in said Court, a Petition For Appeal, in words and figures as follows, to-wit: [60]

[Title of Court and Cause.]

PETITION FOR APPEAL.

To the Hon. Judge Fee:

The above named Plaintiff, Louie J. Antonsen, feeling himself aggrieved by the decree made and entered in this cause on the 13th day of December, 1935, does hereby appeal from said decree to the United States Circuit Court of Appeals for the 9th Circuit, for the reasons set forth in the assignment of errors filed herewith, and Plaintiff prays that his appeal may be allowed and that citation issue as provided by law, and that a transcript of the record, proceedings, documents and exhibits upon which said decree was based, duly authenticated, be sent to the United States Circuit Court of Appeals for the 9th Circuit, under the rules of such court in such cases made and provided.

CLARENCE W. PIERCE,

Counsel for Plaintiff.

Service of a copy of the above admitted this 14th day of Dec., 1935.

C. O. FINLASON,

Attorney for defendant.

[Endorsed]: Filed December 14, 1935. [61]

AND AFTERWARDS, to-wit, on the 14th day of December, 1935 there was duly filed in said Court, an Assignment of Errors, in words and figures as follows, to-wit: [62]

[Title of Court and Cause.]

ASSIGNMENT OF ERRORS.

Comes now the Plaintiff in the above entitled cause, and having prayed and appealed to the Circuit Court of Appeals for the 9th Circuit from the decree made and entered in this cause on the 14 day of December, 1935, says that said decree is erroneous and unjust and against the rights of said Plaintiff, and as an assignment of errors therein, represents that said District Court erred in the following particulars:

I.

The Court erred in dismissing Plaintiff's Bill of Complaint.

II.

The Court erred in holding that the Plaintiff, Louie J. Antonsen, was not the original and first inventor or discoverer of any material or substantial part of the thing patented by Letters Patent No. 1,731,967.

III.

That the Court erred in holding that Claude C. Rafter was the original and first inventor of any material and substantial part of the machine disclosed and its operation and process as taught by said Patent No. 1,731,967.

IV.

That the Court erred in holding that the Rafter machines [63] one of which is owned and operated by the Defendant herein, from the inception of power use thereon continuously down to the date hereof produced torn feather edged excelsior by passing

multiple layers of newspaper or other suitable paper stock through a pair of parallel and oppositely rotated spindles, each mounting a plurality of intermeshing beveled edge discs, and that when fed four sheets or upwards of paper stock, there was a shifting of the upper spindle of discs so as to take them out of facial contact with the lower discs, and thereby producing torn paper excelsior.

V.

The Court erred in holding that a nut placed on the end of the upper spindle when turned adjusted the space relationship between the sets of intermeshing discs.

VI.

The Court erred in holding that the said Rafter machine, as early as August or September, 1923, manufactured paper excelsior by tearing sheets of paper stock into narrow strips, and discharging them from the machine, and piling them in haphazard fashion.

VII.

The Court erred in holding that there is no difference between the paper excelsior first manufactured by said Rafter and that produced by Plaintiff Antonsen upon his invented machine.

VIII.

The Court erred in holding that the intermeshing discs of said Rafter's machines were so adjusted as to be not touching or in facial contact, but to have a one-thirty-secondth of an inch separation. [64]

IX.

The Court erred in holding that said Rafter invented a machine upon which U. S. Letters Patent could have been secured.

X.

The Court erred in holding that said Rafter, through his own, or his attorney's oversight or inadvertence, failed to claim in his patent application what he was entitled to, and what was disclosed and visible in the actual machines constructed by said Rafter.

XI.

The Court erred in holding that the said Rafter machines manufactured paper excelsior of a kind and in the manner described in said U. S. Patent No. 1,731,967.

XII.

The Court erred in holding that the prints published in The Times newspaper on March 29, 1925, show the said Rafter machine manufactured paper excelsior by tearing and severing sheets of paper stock into narrow strips, separating said strips and piling them in haphazard fashion, and further in holding that said prints show the paper excelsior therein photographed as piled in a haphazard manner, and that the individual strips reveal rough feather edges.

XIII.

The Court erred in holding that the other machines contemporaneously manufactured by the said Rafter produced torn paper excelsior feather edged, and separated one from the other and piled in haphazard fashion, and in further holding that the excelsior discharged from said machines, as an inherent and characteristic attribute of said machines, was separated and piled in a haphazard fashion. [65]

XIV.

The Court erred in holding that said Rafter machines were not operated with the contiguous intermeshing discs in facial contact, and in further holding that the said machines were not adjusted to so operate, and in further holding that in fact and

in practice the said Rafter machines were adjusted to have a clearance or separation between the surface sides of the contiguous discs, and that such separation was intentionally made by the parties who understood the means and manner of making the same and appreciated said adjustment.

XV.

The Court erred in holding that it was a small and simple matter to adjust said Rafter machines so as to obtain the amount of desired separation between the surface edges of contiguous intermeshing discs, and a simple matter for an ordinary mechanic to make the upper spindle of said machines fixedly mounted instead of yieldably so.

XVI.

The Court erred in holding that Louie J. Antonsen, Plaintiff herein, purposely instituted suits in other jurisdictions geographically removed from the above entitled Court to avoid the defenses raised in the above entitled suit.

XVII.

The Court erred in holding that the evidence of the Defendant on the facts found by the Court is clear, unequivocal and convincing, and establishes defenses alleged in said Defendant's answer, and has sustained every burden of proof placed on said Defendant by clear, unequivocal and convincing evidence.

XVIII.

The Court erred in holding that Louie J. Antonsen, Plaintiff herein, invented nothing.

XIX.

The Court erred in holding that U. S. Letters Patent No. 1,731,967, issued to the Plaintiff herein, are void and of no force or virtue.

XX.

The Court erred in not rendering a decree in accordance with the physical exhibits admitted in evidence.

XXI.

The Court erred in not rendering a decision in accordance with the prayer of Plaintiff's Bill of Complaint.

XXII.

The Court erred in not holding that the machine and process taught by Plaintiff's patent in Claims 1, 2 and 7 of said patent in suit were infringed.

XXIII.

The Court erred in overruling Plaintiff's exceptions to Defendant's proposed Findings of Fact, Conclusions of Law and Decree.

WHEREFORE, Plaintiff prays that said decree be reversed.

CLARENCE W. PIERCE,

Plaintiff.

Due service of a full and complete copy of the above entitled Assignment of Errors admitted as of this 14th day of December, 1935.

C. O. FENLASON,

Counsel for Defendant.

[Endorsed]: Filed December 14, 1935. [67]

AND AFTERWARDS, to-wit, on Saturday, the 14th day of December, 1935, the same being the 23rd JUDICIAL day of the Regular November TERM of said Court; present the Honorable James Alger Fee, United States District Judge, presiding, the following proceedings were had in said cause, to-wit: [68]

[Title of Court and Cause.]

ORDER ALLOWING APPEAL.

A petition for appeal having been heretofore duly filed in this cause, it is ORDERED that the appeal presented by the Plaintiff herein, be and it hereby is allowed to the United States Circuit Court of Appeals for the Ninth Circuit; and it is ordered that a transcript of the record proceedings and papers and the exhibits submitted in said cause be transmitted to the United States Circuit Court of Appeals for the Ninth Circuit in accordance with the rules of practice.

It is further ORDERED that the plaintiff file a bond to be approved by this Court in the sum of \$250.00 to answer all costs which may be adjudged or awarded against plaintiff, or any failure to prosecute his appeal to effect and shall fail to sustain his appeal.

It is further ORDERED that a citation be issued citing the defendant to be and appear in the United States Circuit Court of Appeals for the Ninth Circuit within thirty (30) days from the date of said citation.

Dated this 14 day of December, 1935.

JAMES ALGER FEE,

U. S. District Judge.

[Endorsed]: Filed December 14, 1935. [69]

AND AFTERWARDS, to-wit, on the 14th day of December, 1935, there was duly filed in said Court, a Bond on Appeal in words and figures as follows, to-wit: [70]

[Title of Court and Cause.]

COST BOND ON APPEAL.

KNOW ALL MEN BY THESE PRESENTS:

That we, Louie J. Antonsen, as Principal, and UNITED

PACIFIC CASUALTY INSURANCE COMPANY, a corporation organized under the laws of the State of Washington, and authorized to transact business in the State of Oregon, as Surety, are held and firmly bound unto C. C. HEDRICK, individually, and doing business under the assumed name and style of Paper Excelsior & Pad Co., the defendant above named, in the full and just sum of TWO HUNDRED FIFTY (250.00) Dollars, for which sum well and truly to be paid, we bind ourselves, our and each of our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

SIGNED AND SEALED this 14th day of December, 1935.

THE CONDITION OF THIS OBLIGATION IS SUCH that

WHEREAS, on the 13 day of December, 1935, the above entitled court dismissed the complaint of the Plaintiff and the cross-complaint of the Defendant, and

WHEREAS, the above named Principal, Louie J. Antonsen, has heretofore given due and proper notice that he appeals from said dismissal of the Plaintiff's complaint,

NOW, THEREFORE, if the said principal, Louie J. Antonsen, shall pay to C. C. Hedrick, the defendant above named, all costs that shall be awarded against him on the appeal or on the dismissal thereof, not exceeding the sum of Two Hundred Fifty (250.00) Dollars, then this obligation shall be void, otherwise to remain in full force and effect.

L. J. ANTONSEN,
Principal.

UNITED PACIFIC CASUALTY INSURANCE CO.

[Seal]

By DICK REYNOLDS,
Attorney in Fact.

Examined and approved this 14 day of December, 1935.

JAMES ALGER FEE,
Judge.

[Endorsed]: Filed December 14, 1935. [71]

AND AFTERWARDS, to-wit on the 28th day of February, 1936, there was duly filed in said Court, a Praecipe for Transcript, in words and figures as follows, to wit: [72]

[Title of Court and Cause.]

PRAECIPE FOR TRANSCRIPT OF RECORD.

IT IS HEREBY STIPULATED between the parties hereto through their attorneys, that the transcript of record will contain the following:

TO THE CLERK OF THE ABOVE ENTITLED COURT:
Please prepare, certify and file in the United States Circuit Court of Appeals for the 9th Circuit, pursuant to appeal taken by the Plaintiff in the above entitled cause, a transcript of record, and include therein the following papers, records and documents filed in your office in the above entitled cause, to-wit:

1. Amended Bill of Complaint omitting verification.
2. Answer, omitting verification and exhibit.
3. Reply, omitting verification.
4. Findings of Fact and Conclusions of Law entered December 13th, 1935.
5. Plaintiff's exceptions to Findings and Conclusions, filed Nov. 14, 1936.
6. Order of December 13, 1935, overruling Plaintiff's exceptions to Findings and Conclusions.
7. Decree, dated and entered December 13, 1935.
8. Petition for Appeal. [73]
9. Order allowing Appeal.
10. Assignment of Errors.
11. Bond on Appeal.
12. Citation with respect to Appeal.
13. This Praecipe.

14. Certificate of Clerk.
15. Narrative form of testimony of witnesses, together with stipulation and order attached thereto, approving same.
16. Stipulation under Rule 23.

Dated January 11th, 1936.

CLARENCE W. PIERCE

Attorney for Plaintiff.

C. O. FENLASON

Attorney for Defendant.

[Endorsed]: Filed February 28, 1936. [74]

AND AFTERWARDS, to wit, on the 9th day of May, 1936, there was duly filed in said Court, a Statement of the Evidence, in words and figures as follows, to wit: [75]

[Title of Court and Cause.]

ORDER APPROVING STATEMENT.

There having been presented to the Court a statement of the evidence in the above cause, and the parties having agreed to said statement, and it appearing therefrom to the Court that the same is a true, complete and properly prepared statement and contains all the evidence essential to the decision of the questions presented by the appeal of this cause, the Court being advised,

IT IS HEREBY CERTIFIED FURTHER AND ORDERED That the statement of the evidence in the above cause is true, complete and properly prepared, and that it contains all the evidence essential to the decision of the questions presented by the appeal of this cause, and it is hereby settled, allowed and approved as the statement of the evidence herein

and is ordered filed with the Clerk of this Court to become a part of the record for the purposes of the appeal.

Done in open court this 9th day of May, 1936.

JAMES ALGER FEE

Judge.

Presented by

CLARENCE W. PIERCE

One of attorneys for Plaintiff

O. K.

C. O. FENLASON,

Atty. for Deft. [76]

[Title of Court and Cause.]

STIPULATION WITH RESPECT TO NARRATION OF
TESTIMONY OF WITNESSES.

IT IS HEREBY STIPULATED between the parties to the above cause, that the papers, instruments and exhibits, statement of witnesses and Court proceedings as enumerated in the praecipe for transcript of record constitute all the papers, pleadings, exhibits, documents and statements of evidence and court proceedings that are essential to the decision of the questions presented by this appeal, and that the statement of evidence is true, complete and properly prepared.

CLARENCE W. PIERCE

Plaintiff's Counsel.

C. O. FENLASON

Defendant's Counsel. [77]

LOUIE J. ANTONSEN,

plaintiff, testified as follows:

I have lived in Seattle, Washington, about twenty years. I am the legal owner and holder of Patent No. 1,731,967, issued to me on October 15, 1929. At the time of filing my application for patent, August 3, 1926, I had not filed, nor authorized anybody to file any application for patent on the same machine or method in any other country, nor had I assigned any of my right to my invention. I am a citizen of the United States.

Plaintiff's Exhibit 1 is a copy of Patent No. 1,731,967, the patent in suit.

PLAINTIFF'S EXHIBIT 1

PAPER EXCELSIOR MACHINE

Filed Aug. 30, 1926

2 Sheets-Sheet 1

Fig. 1

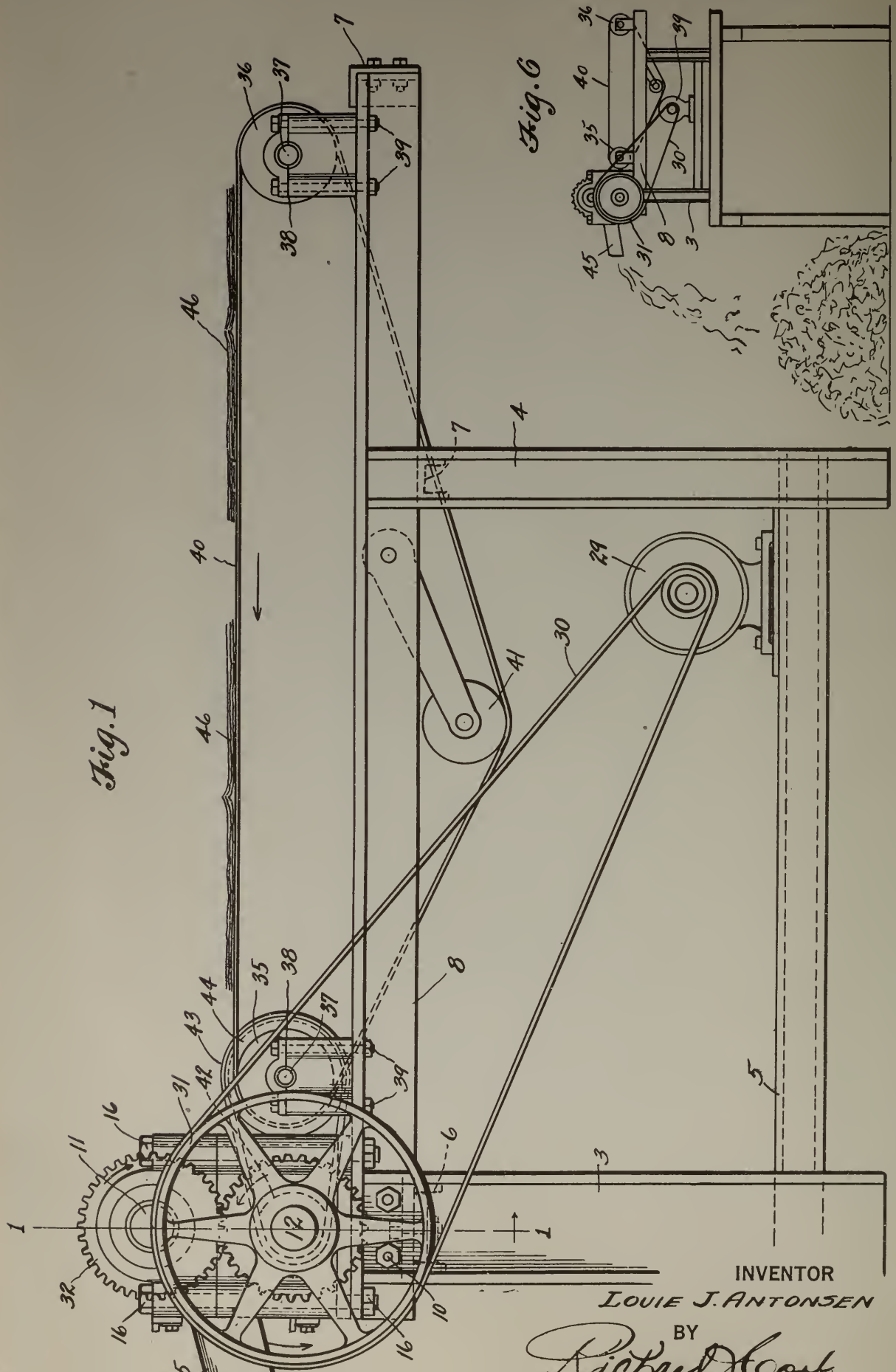
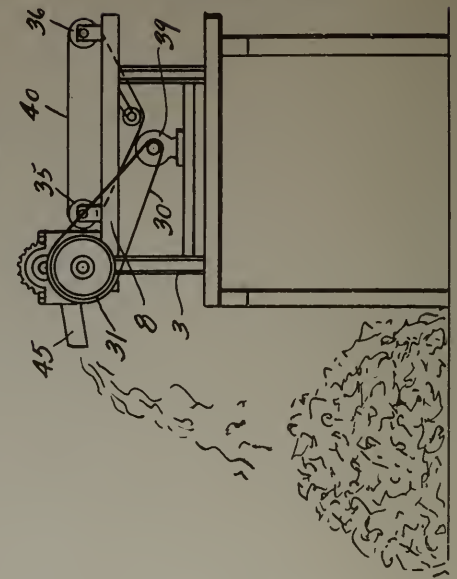


Fig. 6



INVENTOR

LOUIE J. ANTONSEN

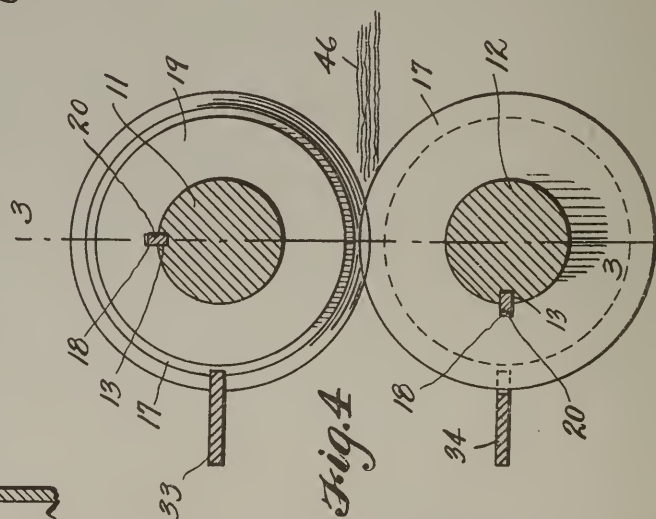
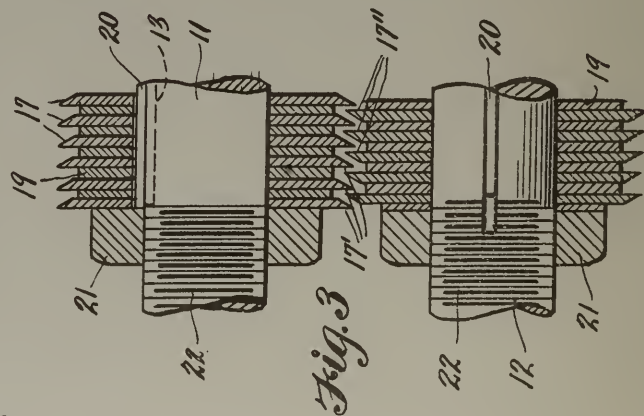
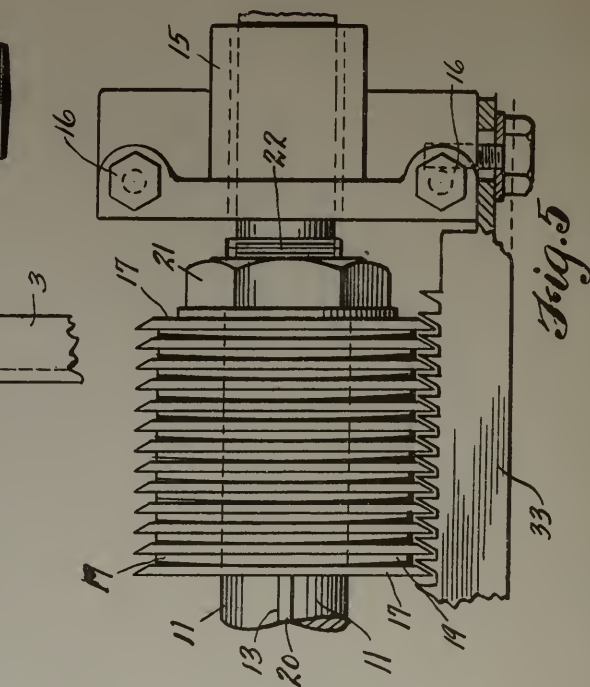
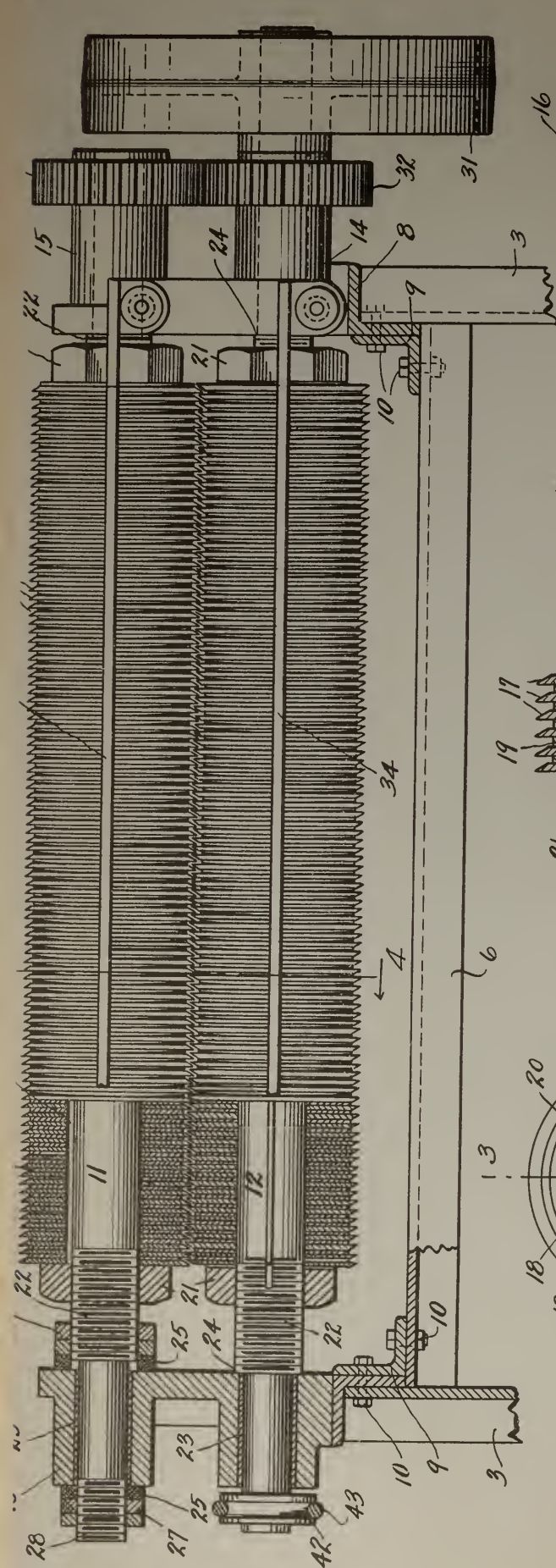
BY

Richard Hook

PAPER EXCELSIOR MACHINE

Filed Aug. 30, 1926

2 Sheets-Sheet 2



INVENTOR
LOUIE J. ANTONSEN

BY
Richard Hook
ATTORNEY

UNITED STATES PATENT OFFICE

LOUIE J. ANTONSEN, OF SEATTLE, WASHINGTON

PAPER-EXCELSIOR MACHINE

Application filed August 30, 1926. Serial No. 132,549.

My invention relates to improvements in shredding machines of the particular type adapted to manufacture paper excelsior from waste paper.

It has been customary heretofore to cut the paper into narrow strips or shreds by means of a machine consisting essentially of a pair of oppositely rotating, parallel shafts on which are mounted cutting disks intermeshed and in facial contact. The narrow paper strips cut by such machines have straight, sharp edges as the result of the true shearing action of the rotating cutters. In handling excelsior made of these strips, the sharp edges often cut the hands of the packer. Furthermore, the strips are so uniform and straight that such excelsior is found to "pack" and is less resilient than the wood excelsior.

Machines of the type mentioned have a comparatively small production capacity because of the inherent limitations in the cutting process, and in the method used to feed the material to the cutters.

The object of my invention is to provide improved means for the shredding of paper whereby the same is torn, instead of cut, into narrow strips or shreds, producing thereby irregular feathery edges.

A further object is to provide means for the separation of the shreds cut from multiple layers of paper and to prevent the same from winding about the disk spindles of the machine.

A final object is to provide an improved method of manufacturing paper excelsior, whereby the production capacity of the shredding machine is greatly increased over previous methods.

With the above and related objects in view, the invention consists in certain parts, combination of parts and methods hereinafter described, illustrated in the accompanying drawings and embraced in the appended claims.

method of mounting, adjusting and the disk spindles;

Figure 3 is an enlarged, fragmentary view on line 3--3 in Figure 4 and Figure 5 is a cross sectional view on line 4--4 in Figure 2, and show the relative position of the shredder discs and combs.

Figure 5 is an enlarged plan view of the gear end of the top disc spindle.

Figure 6 illustrates a desirable method of mounting the machine.

Referring more in particular to the drawings, throughout which like reference numerals are used to indicate like parts, the machine of my invention consists of a main frame, preferably composed of members 3 and 4, horizontal members 5 and 6, and main frame members 7 and 8, the whole being firmly fastened together by clip angles 9 and bolts 10. The frame provides a substantial and rigid support for the operation of the machine.

Spindles 11 and 12 are journaled at the ends of the frame and provided with longitudinal keys 13. The shredder discs 14 are mounted in bearing blocks 15 which are securely fastened to one of the main frame members 8 by means of bolts 16. The shredder discs 17, provided with keys 18 and preferably of the form illustrated in Figure 1, may be mounted alternately with spacers 19 on spindles 11 and 12 with bevelled edges opposite and secured to the spindles against rotational displacement by means of keys 20. The shredder discs 14 are held in proper axial position on the spindles by means of nut 21 and washers 22. Bearing blocks 15 and 16 are provided with bronze bushings 23 in the journaled ends of spindles 11 and 12 to rotate.

Spindle 12 and its shredder discs are held in axial position by means of shoulder 24. The shredder discs mounted on spindle 11 are adjusted near to but not touching the shredder discs of spindle 12, by means of thrust

or 29 which may be mounted on horizontal frame members 5 and connected by belt 30 to pulley 31 fixedly attached to the frame 11. Gears-32 in turn transmit motion to spindle 12, thereby causing it to rotate in the opposite direction.

It is apparent that paper fed between these oppositely rotating, edged discs, although not in direct contact, will instantly grip the paper and hold it against any substantial diminution of its width so that, as the paper passes between the edges of the discs tear their way through the paper producing a multiplicity of narrow strips or shreds having irregular feathered edges.

Discs 33 and 34 are adjustably mounted to vary the horizontal diameters of the shredder discs and on the discharge side of the discs to prevent the paper strips from winding about the spindles.

Discs 35 and 36 having journals 37 rotatably mounted on bearings 38 secured to main frame 5 by means of bolts 39, together with tightener 40 and tightener 41, provide an invariable means for feeding the paper to the shredder. The belt 40 is driven at suitable speed by means of pulley 42 on spindle 12, and pulley 44 fixedly mounted on a shaft (not shown) from a journal of the frame. A chute 45 may be used to direct the shredded paper away from the shredder discs.

The machine is preferably mounted at a suitable elevation above the surface into which to receive the product of the machine, as indicated in Figure 6, and is operated as follows: The shredder disc-spindles 11 and 12 feed belt 40 are brought up to speed in the direction indicated by the arrows in Figure 1. Paper stock 46, such as old copies of newspapers, are unfolded by the operator and placed on the feed belt 40 which carries the several thicknesses to the shredder discs 17 between which it is drawn by the action of the discs themselves, at the same time carrying the multiple thicknesses of paper in longitudinal strips of suitable width having irregular, feathery edges. The speed of rotation of the shredder discs is such that the strips thus formed are projected from the rolls at a high velocity through the shredder which effectively separates them into longitudinal strips by the time they reach the discharge, thus thoroughly mixing the strips in a haphazard fashion and producing very irregular and satisfactory paper excelsior, as has been found to have a ready market competition with wood excelsior, straw and packing materials.

The separation of the stacks of strips torn by the combined action of the shredder discs and the tendency of one edge of

straight sides 17" of the discs on spindle 12, thus tending to impart a rotary motion axially of the strips.

The separation of the strips is further assisted when they are carried against combs 33 and 34, which often wrinkle the strips in preventing their winding about the spindles.

It is found that feeding the paper between the shredder disc spindles 11 and 12 by means of belt 40 permits the operation of the spindles at a much higher speed, serves as a valuable protection against injury to the operator, and enables him to devote his entire time to rapidly feeding the opened papers onto the belt, all of which greatly increase the capacity of the machine.

The adjustment of the space between edges 17' and 17" of the shredder discs 17 on spindles 11 and 12 is not critical, but it has been found advantageous to vary the adjustment slightly when shredding papers having a materially greater or smaller number of pages.

This method of shredding has proved to be far superior to the cutting method for the manufacture of paper excelsior, and the machine described embodying my invention has been found to have a production capacity many times that of other shredding machines of comparable size.

As will be evident, the mechanism may be variously modified without departing from the spirit of the invention herein described and shown, and embraced within the scope of the appended claims.

What I claim as new and desire to protect by Letters-Patent, is:

1. In a paper shredding machine, the combination of a pair of parallel and oppositely rotated spindles, each mounting a plurality of intermeshing, bevel-edged discs, and means for bodily shifting the discs of either group in the axial direction of their spindles for the purpose of adjusting their spaced relation with the discs of the other group.

2. In a paper excelsior machine, the combination of a pair of oppositely rotated parallel spindles, each having a plurality of bevel-edged discs fixedly mounted thereon, the discs of said spindles intermeshing with their edge sides adjacent but not touching, and means synchronized with the spindles for conveying and feeding the stock between said intermeshing discs.

3. In a machine for making paper excelsior, the combination of a pair of oppositely rotated spindles, each mounting a plurality of bevel-edged discs fixedly attached thereto, the discs of said pair of spindles intermeshing with their respective edge sides adjacent but not touching, means for conveying to and

the shredded stock from winding about the same.

4. A paper excelsior machine, comprising in combination a pair of oppositely rotated, parallel spindles, each mounting fixedly thereon a plurality of bevel-edged discs, means for maintaining the discs of one spindle intermeshed with those of the other spindle, said intermeshing discs having their edge sides adjustably adjacent but not touching, a belt for conveying the stock to and feeding it between said intermeshing discs, and combs having teeth intermeshing with the discs of each of said spindles on the discharge side thereof.

5. In a machine of the class described, the combination of a pair of spindles, each mounting a plurality of bevel-edged discs alternating with spacers, means for fastening said discs for rotation with their respective spindles, means for securing said discs and spacers in axial position on said spindles, a frame and bearings for the rotative and parallel mounting of said spindles with their respective discs intermeshing, beveled sides, opposed means for axially adjusting the space between the adjacent edge sides of said intermeshing discs, means for rotating said spindles in opposite directions, a pair of combs with teeth intermeshing with the discs of each of said spindles on the discharge side thereof, means for adjustably mounting each of said combs, and means for conveying the stock to and feeding it between said intermeshing discs.

6. The means for manufacturing paper excelsior and the like, comprising the combination of a belt conveyor, a shredder head of the type described, combs adjacent the discharge sides of the edged discs of said shredder head, and a chute for directing the shredded stock away therefrom.

7. The method of manufacturing paper excelsior and the like which consists of tearing sheets of paper stock into narrow strips and separating said strips and piling them in haphazard fashion.

Signed at Seattle, Washington, this 23rd day of August, 1926.

LOUIE J. ANTONSEN.

(Testimony of Louie J. Antonsen.)

I first became interested in paper excelsior in the fall of 1920, at which time and for some years before, I was working for the Seattle Post Intelligencer, a daily newspaper. I had charge of the distribution of papers in a section of the city, and the overage, or return papers were given to me as part payment for my work. From 1916 to and including a part of 1920, I exported these surplus papers to China and Japan, getting as high as \$44.00 a ton. After that I sold them to fish markets and other places as wrapping paper.

In the fall of 1920, I tried to build a machine that would cut the surplus papers into paper excelsior. The machine was 12 inches wide and would cut half a newspaper. It was constructed with two rolls of discs, upper and lower, with opposite intermeshing discs in facial contact. These discs were square on the cutting edge. This machine manufactured three-eighths inch wide cut paper excelsior. Production was slow because the machine would cut at the most about twelve thicknesses of paper at one time. My best customers for this excelsior was a furniture store and the Ford factory. I sold about two tons a month. I experimented with this machine for about a year.

Then I constructed another machine with a V-shaped edge to the discs or knives, trying to increase production. This machine [78] wasn't much better than the first. I operated it until 1923. Then I got a clipping disc used by the paper mills, 3½ inches in diameter, with a square edge. I used these on a 12-inch machine.

In January, 1924, I learned about and bought a Rafter machine, taking delivery on it in June of 1924. I bought Rafter's machine, patent rights for Seattle, a baler, a truck, a scale, a few bales of excelsior and some miscellaneous stuff. There was

(Testimony of Louie J. Antonsen.)

a written purchase agreement but it was destroyed when my plant burned. There was a statement in the agreement about a pending patent. I bought the Rafter machine because it was important that I be protected on the territory from anyone else in the sale of excelsior. I moved this machine to another place in Seattle, and operated without changing it until about March, 1925. I had Claude E. Rafter work for me from June, 1924, to March, 1925, then Leonard Simpson for about six months.

The machine I had experimented with and the one I bought from Rafter were cutting machines, and I could feed only 12 pages through them or they would clog. When they clogged they stopped. When I tried to get the clogged paper out I would run something between the discs and sometimes, it was necessary to take the rolls apart to clear them.

In experimenting with my third machine one day, I had it to pieces. In putting it together, I left off a nut and when I fed paper through it the machine broke. The next day I put it together, didn't adjust it, ran paper through it and I noticed it went faster than before. So I added more paper to it, and instead of cutting about 12 pages, I could shoot through a regular newspaper. Then I realized the machine could take more paper than it did before. I also noticed, instead of the paper coming out and falling down, it was spreading all over. I was satisfied then that the machine could produce more excelsior and a new kind. [79] The excelsior, instead of having a smooth edge, had a rough edge. It was torn instead of cut, and the excelsior, instead of falling down below the machine, spread out all over and intermingled. The intermeshing discs, instead of being in facial contact, as before, were left open just enough for the disc sides to be adjacent but not touching. This machine

(Testimony of Louie J. Antonsen.)

had the paper mill cutter discs. This machine, after the change, was the same as a cutting machine, except that where the intermeshing discs had been in facial contact, in the new adjustment there was space between the discs of about a thirty-secondth of an inch. This occurred in December, 1924, and it was at that time I first conceived of my invention.

Then I went to Robert L. Rockwell, a patent attorney and patent engineer, in the last of January of the first of February, 1925, and told him what I had discovered, and torn excelsior being a new product and tearing excelsior a new method, I felt I was entitled to the protection of a patent. Later, I also consulted Mr. Cook, who acted as the patent attorney.

The difference between cut and torn paper excelsior is demonstrated this way: Paper is made up of long and short fibers. When paper is torn it gives way at the short fibers, which are the weak ones. This causes the paper to curl or stretch. When the paper is cut the long and short fibers are both cut, and there is no stretch to the paper. Samples of torn and cut paper excelsior were placed in an envelope and admitted as Plaintiff's Exhibit 2.

By the new tearing method, instead of the cutting method, I was able to increase production capacity all the way from six sheets by the cutting method, to 40 sheets by the tearing method. In feeding a cutting machine it is necessary to take the paper apart, sort it out ready to feed only so many sheets at a time, up to twelve sheets or six sheets. It takes twice as much labor to operate a cutting machine as it takes to operate a tearing machine, because of having to sort out and separate the newspaper sections. It is at least \$2.00 a ton cheaper to manufacture torn paper than to make [80] cut excelsior.

(Testimony of Louie J. Antonsen.)

I first saw the Defendant's machine in Portland about the early part of 1926. That machine now could be adjusted to cut paper instead of tearing it. As a cutting machine its capacity would be twelve pages or six sheets at one time, as a tearing machine its capacity would be increased to sixty pages.

Torn paper excelsior, as a finished product, is better for packing than cut excelsior. When the excelsior is cut, the edges are slick, and it will flatten out and sift down in packing. When it packs down it will stay down. Exhibit 3 is 44 pages and is a sample of cut excelsior, this was cut with a knife because no cutting machine could cut that many pages at one time. It was prepared to show what cut excelsior was like in the same quantity as Exhibit 4, which is torn. Exhibit 4, being torn, has the ragged and split edges which hang together and when ruffled and fluffed up, it stays that way and does not press down.

The machine which I purchased from Claude C. Rafter early in 1924, was a cutting excelsior machine. It would successfully feed up to about six sheets, or twelve pages at one time. I had the same trouble with the Rafter machine in clogging that I had with the machines I was experimenting on.

After I filed my patent application, I manufactured bales of torn excelsior which I gave to prospective buyers. One of the largest was the Frederick & Nelson department store in Seattle. At that time the store was using a Blumfeldt & Rapp machine for cutting their own paper excelsior. After they tried my torn excelsior, they bought all their excelsior from me. They had also used wood excelsior. Then I made a trip to San Francisco and saw Doernbacher, a department store, and in Los Angeles I saw the Bullock and Broadway department stores. I had to go through the same performance as with Frederick & Nelson. I gave them a sample ton of torn excelsior apiece to try, and

(Testimony of Louie J. Antonsen.)

they are using nothing but torn excelsior now. After that I shipped them torn excelsior direct from Seattle in [81] ton lots. All this excelsior was manufactured by the tearing method.

After I applied for my patent, I went East, visiting Minneapolis, Chicago, St. Louis, Cleveland, and as far as Philadelphia. I made trips East in 1926, 1927, 1928 and 1930. In 1927 I had received the reply on my patent, and the purpose of the 1927 trip was to introduce my machines and get them installed by people whom I felt could operate them. I had no success at that time. There was some cut excelsior manufactured by a Blumfeldt & Rapp machine in St. Louis and Chicago. There was also some wood excelsior on the market. I went East again in 1928 to Minneapolis, St. Louis and Philadelphia to introduce my machines. In 1928, I lined up the Pioneer Paper Stock Company of Minneapolis and the General Paper Stock Company of St. Louis. In the fall of 1928 or early 1929, I placed a machine in Cleveland, Ohio. All these machines were let out on a royalty basis. Then I wrote a letter to every big paper dealer and every big Chamber of Commerce all over the country about the machine, trying to promote the sale of it throughout the country. I also wrote the leading manufacturers of wood excelsior. In 1930 I went back to Chicago and saw Mr. Hodge of the American Excelsior Corporation. I gave him a license to operate my machine and process over the whole country except Washington, Oregon, California and British Columbia, on a royalty basis, and he took over the other machines I had placed in the east.

Cross Examination.

There was excelsior on the market made from printers trimmings when I began experimenting with excelsior machines in 1920. I knew of no established business at that time for the manufacture of paper excelsior.

(Testimony of Louie J. Antonsen.)

I bought the discs for my first machine from the Arneson Tool Shop on First Avenue in Seattle. Defendant's Exhibit A is a sample of the disc. That first machine was along the same line as my pat- [82] ented machine, consisting of two rolls of discs, an upper and lower, except that the discs had square edges instead of beveled and the intermeshing discs were in facial contact instead of having a separation. There was no give to either the upper or lower shaft, they were fixedly mounted on bearings set in the frame of the machine. There were only two boys who worked with me at the Post Intelligencer, who saw this machine, Henry Geroux and Joe Berger, and only they know about it. I commercially manufactured and sold paper excelsior with that first machine. It was sold to Renfro and Wadensteen on 5th and Union in Seattle, the Ford Company, and possibly to the Seattle Hardware, and also a trunk company on First Avenue. That machine produced cut excelsior and the edges were smooth and sharp like Exhibit 3 and this continued until I changed the machine in 1922. It was something over a year after I started on the first machine that I changed the discs or knives to the kind like Defendant's Exhibit B. I used the framework, driving mechanism and the gears of the first machine. Later, I again changed the discs to a square edge and this was not successful. The machine clogged more. I then changed the discs to the kind marked Defendant's Exhibit C, some time in the middle of 1923, prior to meeting Rafter. All three of those machines made cut excelsior.

A Mrs. Wright's boys were working for me selling paper for the Post Intelligencer. I had to notify them of some extra papers, so I called on her. I had to go to Rafter's place where she was working, to find her. I saw Rafter's machine which was

(Testimony of Louie J. Antonsen.)

of a type like my cutting machine. This was in January, 1924. I met Mr. Rafter several days later at his place of business. I was surprised when I saw Rafter's machine. I went out to confer with him on how he came to be in that business, and see if he had a patent on the machine. At that time he told me he had a patent. That was somewhere around the middle of January, 1924. I examined his machine. I have also examined Defendant Hedrick's machine, which was made by Rafter, sold [83] to Wheeler and in turn sold to Defendant Hedrick. The difference between the machines is that at that time the Rafter machine was cutting three-eighths inch wide strip and the Hedrick machine is now tearing a three-sixteenth inch strip. Rafter's machine then had a long belt about twelve feet, where Hedrick's machine now has about a five foot belt. Rafter's machine had the intermeshing discs in facial contact, at rest and in operation, while in Hedrick's machine the discs are separated at all times. In the Rafter machine the opposite discs overlapped a little, while in the Hedrick machine they overlapped considerably more. The upper spindle on the Rafter machine had a spring on it that held the knives on the upper spindle firmly into facial contact with the knives on the lower spindle. While operating with or without load the discs didn't heat, omit sparks or grinding noises.

When too much paper was fed to the Rafter machine, a space would open up between the opposing discs and the machine would stop. By overfeeding any cutting machine you create a space between the opposite discs which fills with paper and the machine naturally blocks and stops. The spring on the Rafter machine was for the sole purpose of holding the intermeshing knives together, in facial contact. The knives stayed together

(Testimony of Louie J. Antonsen.)

until you fed up to about twelve pages or six sheets. When more thicknesses of paper would be fed to the machine the knives spread and the paper would get in between them and block the machine. The machine cannot run when the paper gets in between and spreads the intermeshing discs.

I bought Rafter out about a month after my first visit. I bought his business as a going concern for \$2900.00, which included the protection of his patent for the territory. I did not check his volume of business but very little. At the time of the purchase I had a machine similar to Rafter's, but I had no patent or protection. I didn't buy his business for his excelsior machine, baler, Ford truck, scales, etc., which were of little value, but for the protection in the territory and to have some outlet for my paper. [84] It would cost about \$400. or \$500. to build his excelsior machine.

I met Mr. Wheeler when I was negotiating for the purpose of Rafter's business, or shortly afterwards. After that, I met Mr. Foster and Mr. Henderson. I don't remember stating to Mr. Henderson that Rafter had a gold mine and didn't know it.

After purchase of Rafter's machine I operated it and continued experimenting on my own. I took his machine over in June, 1924, and in March, 1925, I changed the form of the belt from a two to a three spindle adjustment like my patent shows and then continued the operation of that machine until the fall of 1925. Then I made a complete change in the Rafter machine from a cutting to a tearing machine. I took the Rafter machine completely to pieces and beveled the discs more and put them closer together, the blades closer together; where Rafter's machine was three-eighths inch mine is three-sixteenths inch and I cut them deeper, making the discs overlap more.

Q. Is that the only change you made, sir?

(Testimony of Louie J. Antonsen.)

A. The changes consisted of cutting the plates narrower, putting them deeper, making them stationary, taking the spring out, making both upper and lower rolls stationary, changing the belt from a two roller to a three and adding the combs to it. I operated the changed machine until January 18th, 1930, when my factory was destroyed by fire.

In December, 1925, after I had made the changes in the machine I bought from Rafter, I bought a machine from E. L. Foster which Rafter had built and sold to him. I did not buy the Foster machine to use. I bought it to show what a cutting machine would do. I operated this Foster machine for Rockwell, my engineer, to show him what it was like. I told Mr. Rockwell my whole experience about my experimenting, what I had been doing, what I had discovered, and he knew what I had. I did not make my patent application sooner, because of my conversation with Mr. Rockwell, and having told him what I had discovered, and there being more experimenting to do, I continued with my experimenting. [85]

The Foster machine was exactly like the machine I bought from Rafter except in the length of the feeding belt. The shredding discs on the opposite spindles were in facial contact. They were kept in contact by the spring on the upper spindle. The lower spindle was rigid. In feeding up to six sheets or twelve pages, through the machine the spring would hold the knives in facial contact and the paper would be cut. When more sheets was fed, the paper would go between the knives and the machine would lock and clog, just like in cutting with scissors, if you over feed, the blades will twist over or open.

I do not have any sketches, drawings, or photographs of the machines which I worked on, nor any samples of the paper

(Testimony of Louie J. Antonsen.)

excelsior produced by them. I do not have any samples of the excelsior produced by me on the machine which I purchased from Claude Rafter and operated until I changed it from a cutting to a tearing machine; nor do I know where any samples of the excelsior produced on this machine prior to the time I made the changes, can be found. When I showed the Rafter machine which I purchased from Foster, to Rockwell, my patent attorney and adviser, we did not operate the machine under power but only operated it by hand. [86]

At the time I purchased the Rafter machine I was not familiar with the Blumfeldt & Rapp machine. I signed the Defendant's Exhibit G, and I noticed the paragraph on page one, marked with an X. I believe the first time I heard of the Blumfeldt & Rapp machine was in August, 1924, but I am certain I never knew of it until after I had seen the Rafter machine.

The discs on the machine I made my invention on, as compared with the discs on Rafter's machine were more beveled for the reason that when the paper comes in to the intermeshing discs it is corrugated, and if the discs are beveled, it gives more room for the corrugation. That is what I experimented on from my first discovery in December, 1924, until the fall of 1925. In a tearing machine as compared to a cutting machine, the paper is corrugated by the discs, and the paper is torn one sheet at a time in the corrugation. That is why production is increased by the tearing method.

When paper is discharged from a cutting machine it comes out straight. I experimented on the beveled edge discs because the more the edge is beveled, the more the excelsior will turn when it is discharged. When the paper is discharged from a tearing machine, it will automatically twist.

(Testimony of Louie J. Antonsen.)

At the time I moved my plant from Rafter's location to a new one, I knew Rafter was going East to sell his machine. I knew he had sold a machine to Mr. Wheeler. With reference to Defendant's Exhibit H, a newspaper article published March 29, 1925, the witness testified: I don't know when the pictures were taken. My first knowledge of the article was on the date it was published, except Claude Rafter had mentioned to me that someone had been down taking pictures, and he had given them a story of his father's discovery, and what was going on, and I thought it was perfectly all right from what he told me. In 1926, I visited Mr. Wheeler in Portland, when he was operating [87] his machine. I did not examine the machine or the excelsior, and as far as my knowledge goes, his machine was cutting excelsior at that time.

In 1928 I had a selling agency in Portland while Mr. Wheeler was in business. Mr. Converse was my representative.

The American Excelsior Company, to whom I have given a license on the patent in suit has the rights to the whole country except the three Pacific coast states and Vancouver. They also have the rights of my Canadian patent. The machines I had placed in the East before the date of the contract with the American Excelsior Company were taken over by the American Excelsior Company under my license to them.

It is stipulated between the parties that proper notice was given by mail to the Defendant that he was infringing.

I showed Robert L. Rockwell, my engineer, the machine I had purchased from Foster in about March or April of 1926. At that time when he was at my plant he operated the Foster machine and put paper through it to see how it worked. At that time he also saw the one I had purchased from Rafter, and I explained to him what I had done to that machine, and

(Testimony of Louie J. Antonsen.)

how easy it was, and how little it took to make a tearing machine out of a cutting machine. Mr. Rockwell's purpose in examining the Rafter machines was to see how they functioned before and after the changes I had made.

The first time I consulted Mr. Rockwell about my invention was a month or a little more after I had discovered the tearing method, that would make it somewhere around January or February, 1925. I continued to consult Mr. Rockwell to the early part of 1926, talking over my problems with him all the time. He rendered me invoices for the charges he made for that service.

Plaintiff's Exhibit 13, being Antonsen's file wrapper, admitted in evidence. [88]

ROBERT L. ROCKWELL,

a witness called in behalf of the Plaintiff, being first duly sworn testified as follows:

Direct Examination.

Questions by Mr. WINTER:

Where do you reside, Mr. Rockwell?

A. My home is at Fort Madison, Washington, but my office is in Seattle, 804 Alaska Building.

Q. What is your business or profession?

A. I am a consulting engineer, and also a registered patent attorney.

Q. Where is your business? Do you keep an office in Seattle?

A. Yes. 804 Alaska Building.

Q. How long have you been a consulting engineer?

A. Since April 1, 1918.

(Testimony of Robert L. Rockwell.)

Q. What has been your experience as an engineer?

A. Well, my experience has been chiefly along the line of designing new machinery, consultation work along that line, investigation and reports, preparation and prosecution of patents, particularly in connection with those that I have been identified with as an engineer.

Q. How long have you been doing that?

A. I have been particularly active in patent work for the last nine years.

Q. State to what extent does your technical training and experience, the practice of your profession—to what extent have you become familiar with various mechanical principles?

A. Well I am very familiar with them; that is the principal line of work that I have been doing for—ever since I have been in private engineering practice, and even prior to that time.

Q. Are you a graduate of any school?

A. Yes, I am a graduate of the Electrical Engineering Institute of New York; majored in machine design. I have also taught machine drafting and machine design.

Q. Now are you acquainted with the plaintiff, Louie J. Antonsen? [89]

A. I am.

Q. State when you first met him in a business way.

A. He called at my office the first time in January of 1925.

Q. Did he consult you at that time?

A. No, his visit was more in the nature of an inquiry. He asked me if I was in a position to advise him in connection with some experiment he was conducting on a new machine, and whether or not I was able to prepare and assist in the prosecution of the patent that he thought he might want to take out on this machine.

(Testimony of Robert L. Rockwell.)

Q. When did you see him next?

A. It was in the early part of February of that same year.

Q. Did he consult with you at that time?

A. Yes. At that time he explained to me that he was sure that he had a good proposition, but he was practically without funds, and wanted to know if he could make some arrangement with me so that he could drop in from time to time and get advice along mechanical lines, if he would assure me that I would have the job of preparing and prosecuting the patent for him.

Q. Now did he employ you finally to get a patent?

A. Yes, he did.

Q. Handing you a document which is, I think, marked Plaintiff's Exhibit 1, you have seen, I think, that document before?

A. I have.

Q. Were you employed by the plaintiff in regard to securing a patent? What kind of a machine did that patent cover?

A. This was a paper excelsior machine adapted to produce paper excelsior by tearing, as distinct from cutting.

Q. Now when were you employed to get this patent?

A. I was definitely employed, that is Mr. Antonsen gave me definite instructions to proceed with the preparation of the patent on the 16th of March, 1926.

Q. Before that time had you done any work at all towards getting [90] the patent?

A. In July 1925 we had a search made of the patent records to determine the novelty of his invention in the art.

Q. And did you tell Mr. Antonsen the result of that search?

A. Yes, we considered it fully.

Q. Now what did you do then towards getting the patent?

A. Well, after Mr. Antonsen definitely employed me, I in-

(Testimony of Robert L. Rockwell.)

sisted that I would have to see the machine that he had invented; and he had previously in conversations described the machine, and described other machines, but his description was rather vague, and I insisted that in order to properly execute my task it would be necessary for me not only to see his machine, his new machine, the one that involved the invention, but also any others that would distinguish his invention in the art.

Q. And as a result of that what did you do?

A. The following day Mr. Antonsen took me down to his factory, and he showed me his machine in operation. He also showed me at that time the machine which he had on the balcony but was not operating in production, that was adapted to produce cut paper excelsior, as distinguished from the paper excelsior that he was manufacturing by the tearing method.

Q. Did you see the Antonsen machine in operation at that time?

A. I did.

Q. Can you describe that machine?

A. Yes; the machine consisted, briefly, of a substantial framework, near the front end of which were journaled two oppositely rotating shafts carrying bevel edged discs, the journals were securely positioned against end play by means of shoulders and nuts, and lock nuts, and there was a comb of brass opposite about the middle of the discharge side of each of the groups of discs mounted on the journals; on the upper shaft at one end was a flywheel, as I recall it, and on the other end a pulley; synchronized with the rotating [91] journals was a feed plate which conveyed the material into the rotating discs. This machine was mounted on a balcony at a considerable distance

(Testimony of Robert L. Rockwell.)

above the floor; the exact distance I didn't measure, but I would judge it to be approximately ten feet. It may have been a little less than that, but I would say eight or ten feet; and the paper stock was mounted near the machine so that it could be readily fed onto the belt; the belt then conveyed it to the cutter head, composed of these oppositely rotating spindles which I have described. In passing through them the material was torn and then fell onto the floor below in decidedly haphazard fashion.

Q. Now where was the other machine?

A. The other machine was on the same balcony near the front of the establishment, but was not connected up for production use. As a matter of fact there was no motor on it at the time I saw it.

Q. What difference was there between the two machines?

A. There was this generic difference, that the intermeshing Antonsen machine, the one that was actually operating, in production, had the edges separated so they did not touch. The other machine was distinguished from the Antonsen machine by the fact that the intermeshing discs were in facial contact; they had decidedly sharp edges. There was a spring at one end of the frame, which resiliently urged the upper spindle discs into contact with the lower spindle discs. There was no flywheel on either of the spindles, and there were no combs on that machine.

Q. Did you yourself feed any paper through this machine, or did you see any fed through it?

A. Yes, I did, through both of them.

Q. How did the product compare? Describe the product that was made by the machine which you have last described.

A. This is the machine that was not in production. The machine [92] would cut the paper with very smooth edges up

(Testimony of Robert L. Rockwell.)

to, I would judge, six or seven sheets, and if more was attempted—that is, if one attempted to feed more paper through, the machine would jam; the machine would not operate.

Q. Now in making this experiment how did you—with what power did you drive the machine?

A. By hand power; just turning the wheel by hand.

Q. Now do you know who worked on the Antonsen machine, the one you have first described?

A. Yes.

Q. Who was it?

A. Walter Swarfver.

Q. Did you ever talk to him about the work he did on it?

A. Yes.

Q. Who is he, what is his business?

A. He is a machinist in Seattle, with whom I have previously worked on other—on the development of other inventions.

Q. After you examined the Antonsen machine and had examined the other machine, what did you do with reference to obtaining a patent?

A. Well after we had examined the machines there in Mr. Antonsen's factory, he took me up to Frederick & Nelson's where we saw the Blumfelt & Rapp machine.

Q. Did you examine that?

A. Yes, I did.

Q. What examination did you make?

A. Well I made a critical examination of the condition of the discs, their edges and the fact that they were in facial contact. I also saw the machine in operation and made a critical examination of the product produced by the machine.

Q. What did it produce?

(Testimony of Robert L. Rockwell.)

A. It produced cut strips of paper considerably wider than those produced by Antonsen's production machine, and the strips came out [93] of the machine and settled apparently just one piece on top of the other, and didn't mix. They didn't make a resilient product.

Q. What kind of paper was fed through that Blumfelt—what is that?

A. Blumfelt & Rapp machine.

Q. Blumfelt & Rapp machine.

A. Just ordinary waste paper.

Q. How many thicknesses of paper were fed through that machine?

A. Oh I would say about six or eight. I am sure it was not over eight.

Q. Did it have any tendency to clog or choke?

A. If you fed too many sheets of paper through it, it would simply stop the machine.

Q. Now will you describe the Blumfelt & Rapp machine as compared with the Antonsen machine. I mean not the Antonsen machine that he invented, but the other one that you saw there.

A. The one that was in production?

Q. No, the other one; the one that wasn't—that you operated by hand and that cut the paper.

A. That machine that was operated by hand had less bevel on the cutting edge as I recall it now than the Blumfelt & Rapp machine, whereas the—may I add that the Antonsen production machine had a sharper angle than either of the others?

Q. Now the Blumfelt Rapp machine, how was that constructed? Did that have oppositely rotating spindles?

A. The essential elements, essential operating elements were

(Testimony of Robert L. Rockwell.)

very similar to those of the machine that we operated by hand in Mr. Antonsen's plant.

Q. Will you describe its operating features or members?

A. The machine was constructed on a very substantial frame; there were two oppositely rotating shafts carrying bevel edge discs with the edge side of these discs in facial contact. There was no comb [94] on the discharge side of these shafts, and there was a motor used to drive the shafts, and a gear arrangement in between the two shafts to operate the two spindles or shafts in unison.

Q. The Blumfelt & Rapp machine, you may state whether that cut or tore the paper.

A. That was decidedly a cutting operation.

Q. Who was the attorney that got the Antonsen patent, the one that you have before you, Plaintiff's Exhibit 1?

A. At the time that Mr. Antonsen employed me, I was not registered as an attorney myself, although I had prepared a large number of patent applications, and collaborated with patent attorneys in their prosecution, and in this instance, as in many others, Richard J. Cook acted as the attorney of record in the case.

Q. Who did the work; who prepared the application for the claim?

A. I prepared the pencil drawings; the ink drawing was prepared by Mr. Cook's office; I wrote the specifications and the claims.

Q. Did you do any work of securing this patent after the first application was made?

A. Yes, I consulted with Mr. Cook's associate, Mr. Robinson, as the different office actions came back, and we agreed upon the proper material to incorporate in the reply.

(Testimony of Robert L. Rockwell.)

Q. Now at the time that Antonsen consulted you, did he ever consult you about any machines excepting the two that you inspected?

A. Yes, in February Mr. Antonsen brought in some technical problems in connection with a small machine that he was experimenting with, and he explained at the time that he wanted to tell me the whole story of just what he had done up to date, and what he was faced with, and get my advice in the matter of proceeding with the development of the invention. At the time I was very busy with some design work, and we set a day for a luncheon engagement, and during that luncheon Mr. Antonsen described just what he had done up to date, and asked my advice in regard to the development of [95] the edges to be employed in this cutting—in these shredder discs that he was working with.

Q. You were present today when the court and counsel in this case visited this machine?

A. I was.

Q. You saw this machine in this case operate?

A. I did.

Q. And you saw what it produced?

A. I did.

Q. Did you examine that machine?

A. I did.

Q. I wish you would compare that machine with the machine that Antonsen had bought from Foster, being the machine that you examined at the time that you went over to visit Antonsen's shop.

A. There was a marked similarity in the appearance of the machines, but on critical examination there was a decided differ-

(Testimony of Robert L. Rockwell.)

ence. The similarity resided in the relation of the moving parts, namely the spindles each carrying a plurality of bevel edge discs, and the sharp edges of these discs in the machine that I saw in his plant were in actual facial contact, whereas in the machine that we saw today only one or two discs of each spindle were in actual contact; the others were separated. The machine in Seattle, in Mr. Antonsen's plant didn't have a fly wheel; it had a rather heavy spring; my recollection is that it was decidedly heavier than the spring that is on the machine in question that we saw today. That spring was positioned by means of a lock—I mean a nut and lock only.

Q. Which spring do you mean?

A. The spring that urged the upper shaft and its appended discs into facial contact with the discs on the lower spindle.

Q. Are you speaking about the spring on the Foster machine or on this machine now?

A. The spring on the —well, I am comparing the springs on the two [96] machines; the one that has the heavy spring would be the so-called Foster machine; the one that has the relatively lighter spring would be the one of the defendant's.

Q. What function did the Foster spring perform?

A. The purpose of the Foster spring was to keep the edges of the discs in contact, facial contact, so that the material as it passed through the production head would be cut. I would like to point out this last outstanding difference also. In the so-called Foster machine the edges of the discs were sharp; that was also true on the edges of the discs of the Blumfelt & Rapp machine, all the way, whereas the edges of the Antonsen machine in production, the edges of the discs that I inspected in Walter Swafver's shop and at other times, were dull. As a matter of

(Testimony of Robert L. Rockwell.)

fact, as the machine was made, there being made in Mr. Swarver's shop, he pointed out particularly that instead of making the edges of the discs sharp they proposed to grind them so that they would be blunt, as that had been found by experimentation to produce the better product by means of the tearing process.

Q. Is there any difference between the Foster machine and defendant's machine as far as the upper roll being rigid or fixed?

A. No, the defendant's machine and the Foster machine were similar in that respect. The defendant's machine has a fly wheel; the Foster machine did not have such a flywheel. I think those are the outstanding differences that I noticed.

Q. Did you observe any clogging of the defendant's machine while you observed it today in operation?

A. Yes, sir, I did.

Q. Describe that.

A. As the material passed through the spindles it was noticed that the strands, at least a number of them, appeared to clog, particularly at the end where the discs were in facial contact, not so much on the other portions; but there was a building-up process [97] under way there as the machine operated, which seemed to increase as the stock was fed through the machine.

Q. Could you state why the machine would clog where the discs were in facial contact and did not clog where the discs were separated?

A. Where the discs were separated in that machine the machine employed a true tearing process, whereas where they were in facial contact because of the very unvariable condition of the discs at that particular portion, there was a combination tearing and cutting process. Critical examination of that machine will show that where these discs are in facial contact, that

(Testimony of Robert L. Rockwell.)

the plain surface of the cutting edge has been changed so that at the tips where the discs are in contact a reverse bevel has been established, making very unsatisfactory cutting operation, and in my opinion has a tendency to encourage the jamming of the paper strips in between the discs.

Q. Now were the rolls or spindles secured at either end?

A. The same in defendant's machine as they were in the Foster machine, by being secured at the ends. I take it you mean with reference to the lower spindle or upper spindle?

Q. Both of them. Both lower and upper.

A. The construction was to the best of my recollection, very similar. The upper spindle in the Foster machine was maintained in the position by means of a spring, and that was also the case in the defendant's machine. The lower spindle was positioned by means of shoulders, and I believe a—and I believe these shoulders were engaged in the inner edges of the bearings carried by the frame. The shoulders of this particular machine consisted on one end of a true shoulder, and on the other end of a nut and lock nut; a decisive position.

Q. Now I understood you to say that the discs in the defendant's machine excepting at one end, were separate and apart?

A. Yes, sir.

Q. What would cause these discs to be separate and apart? [98]

A. Unequal spacing of the discs on the two spindles; assuming of course that the discs were all of the same thickness, which I did not have an opportunity to examine critically; a variation in the thickness of the discs, or a variation in the thickness of the spacers or washers, would have a tendency to disturb that precise position for facial contact.

(Testimony of Robert L. Rockwell.)

Cross Examination.

Questions by Mr. FENLASON:

Did you examine the machine in the Antonsen plant, known as the Foster machine, that is the one not operated by power, on more than one occasion, the one that you mentioned?

A. No, that is the only time I saw it.

Q. And you never saw that machine operate under actual conditions of power being applied to it in the usual course of operation?

A. No.

Q. Now the upper spindle was yieldable in longitudinal direction, referring now to what we call the Foster machine. Is that correct?

A. It was, but not to so great an extent as in the defendant's machine.

Q. I understand that, sir; and you attribute the difference in that to the degree of strength of the coil spring?

A. Yes, that would make a decided difference in operation of the machine, just changing the spring.

Q. In other words, if you put a lighter spring in you would have a more easy time to accentuate the longitudinal movement. Is that correct?

A. It would require less force.

Q. It would require less force. That is right. Now from your examination of this Foster machine did you look to ascertain for sure that the discs were in complete facial contact?

A. I did.

Q. You don't undertake to say that these discs at the time you [99] saw it, were in the precise position as they were mounted by Mr. Rafter when he sold the machine?

(Testimony of Robert L. Rockwell.)

A. I couldn't testify to that. I don't know the condition, of course, when he sold it. I can only testify to what I saw.

Q. Was the mechanical condition of that machine such that if there had been a slight separation, aperture, between the contiguous intermeshing discs at the time of its original construction, then that aperture could have been eliminated so as to bring these members, namely the discs, into what you say is facial contact?

A. If the machine was built along the line that I saw it,—I don't know that I get that question.

(Question read)

A. I would say from the construction of the machine that if the spring was there at all they would automatically come into facial contact; as long as that spring is there they would be urged into facial contact at all times.

Q. Was there any limit to the longitudinal shifting of the upper spindle?

A. I suppose the shifting of the upper spindle—I will put it this way: The construction was such that the upper spindle was free to move until the discs of the respective spindles were in contact in one direction; in the other direction they could move until the bevel on one disc interfered with the bevel on the next disc.

Q. That is they had complete oscillating movement measured by the width between the beveled edge or the other edge of the contiguous disc?

A. If sufficient force were applied it could be moved that distance, but it would require a very sizeable force to move it.

Q. And that sizeable force would vary, I suppose, with the strength of the spring. Isn't that right?

(Testimony of Robert L. Rockwell.)

A. Obviously. [100]

Q. And not only with the strength of the spring, but with the tension put upon the coils. Isn't that right?

A. Obviously, yes. Compression of the spring and size of the wire and diameter of the spring would be determining factors.

Q. Suppose you had there a very light spring and you had very light compression, and you put through a sufficient number of papers so that the tension exceeded that exerted by the spring, what would be the movement, if any, of the upper spindle of the machine?

A. I have not observed that from the standpoint of direct examination, but it is my opinion and conviction that in that case the paper would turn over in the interval and block the machine. I don't see how it could do otherwise.

Q. And that would be occasioned by the fact that there are thorough separations between these intermeshing discs?

A. Yes, sir.

Q. If such is the case why don't you have the same phenomenon when you have the same separation, so that instead of being caused on the flexible element, it is caused on the thick spindle?

A. There is a very decided difference in the two that I have not emphasized sufficiently, perhaps, as a groundwork for my reply, if I may insert that. In the cutting machines the lap of the cutting edges is relatively small, whereas the Antonsen machine lap is relatively greater. In the Antonsen machine also the edges—let me refer to it as the pointed edge of the disc—has a more acute angle, so that there is more space in between the different discs, and that clogging does not occur. Furthermore, the paper in passing through the intermeshing discs,

(Testimony of Robert L. Rockwell.)

is bent before it is torn; it is corrugated before it is torn, which greatly reduces the amount of force required to separate the fibers of the different sheets of stock as they pass through the production head, whereas in the cutting machine it is necessary to sever the fibers in [101] order to shear them or cut them.

Q. Let me ask you this: If you have sufficient power there in the Foster machine so as to accentuate the spring compression on the springs, and cause a separation, then you no longer have a cutting machine, do you?

A. It certainly does not——

Q. Would you have a cutting machine then?

A. Will you read the question?

(Question read)

A. No, the machine would clog.

Q. Sir?

A. The machine would clog under those circumstances.

A. That is your opinion?

A. That is my opinion, yes.

Q. That is your opinion. But assuming that it didn't clog?

A. That is my opinion, based on experiments with the so-called Foster machine.

Q. I understand that you turned it over by hand on one occasion?

A. Yes, sir.

Q. Assuming now that it didn't clog, and that it would pass through, what kind of excelsior would be produced?

A. That is, assuming that the machine had been changed so that——

Q. No, no. Assuming now that sufficient paper is fed into the machine so as to compress the spring and in turn to shift

(Testimony of Robert L. Rockwell.)

the upper roll, making an aperture between contiguous threads, and further assuming that the machine won't clog at that point, but it goes through, what will be produced, what kind of paper excelsior?

A. If the conditions were favorable for that operation it would undoubtedly be torn paper excelsior.

Q. And would there be any——

A. I would like to qualify that reply by saying that in my [102] opinion it would require considerable change in the machine to accomplish that.

Q. And would there be any difference between the excelsior so produced under the conditions I outlined in the hypothetical question, and the excelsior produced on the Antonsen machine?

A. Yes, very decidedly.

Q. And that would be, I suppose, that in the Antonsen the width of the excelsior would be more uniform?

A. No.

COURT: I am afraid a little leading, counsel.

Q. Let me put it this way: What would be the decided differences?

A. The decided differences would be principally in the appearance of the edges, and also in the—and also in the way the material would be acted upon by the discs.

Q. Now what would be—under my hypothetical question you told me that if they would work—you reserved an opinion on that?

A. Yes.

Q. It would result in torn excelsior?

A. Yes.

Q. What would be the difference between that torn excelsior

(Testimony of Robert L. Rockwell.)

and torn excelsior made by, we will say, the Antonsen machine?

A. The difference would be principally in the appearance of the edges and in the appearance of the strips, for this reason: In the Antonsen machine the intervals between the discs are fixed; the paper has a chance to slip one way or the other in passing through the production head, and be torn in that operation. Whereas in the hypothetical setup that you enumerated, the paper, if torn, would have to be held in between the intermeshing edges; the spring is there, it is holding it there; there is a condition which is not at all comparable, in my opinion, to that in the Antonsen machine.

Q. Would that change the appearance of the edge of the excelsior?

A. It certainly would. [103]

Q. Which would have a more ragged edge?

A. The material from the Antonsen machine.

Q. Now would you describe the kind of excelsior you cut with the Foster machine in your hand experiment, as having smooth or rough edge?

A. Smooth edge, smooth enough so that it could easily cut the hand.

Q. And that would be to an ordinary person readily discernible as a smooth edge, I suppose?

A. Yes.

Q. What would be the effect of idling a machine like the Foster machine having—running at an idling speed so that the peripheral speed of the discs was about twelve or fifteen hundred feet per minute?

A. I will have to ask you first what you mean by idling?

Q. I mean running the machine without feeding through any material for the purpose of being cut.

(Testimony of Robert L. Rockwell.)

A. What would be the effect, you say?

Q. Yes, what would be the effect upon the metal?

A. The edges would simply grind together, that is all.

Q. Would the discs become hot?

A. They would if that operation was continued long enough.

Q. And how long do you think it would have to continue running metal to metal at a speed of twelve hundred lineal feet per minute, with no lubrication, in order to become hot?

A. That would depend on several things. One of the determining factors would be the amount of lap of the discs, because that will represent then the sweep of metal past metal. In the so-called Foster machine that lap is small. Furthermore a test of the disc was filed, and I found that to be hard. If the metal is hardened the wear there would be relatively small. Furthermore, this is not as *a* severe a condition as a person might think, in that we have a rolling action between the discs so that we have one element of the [104] contact surface in contact at one instant; then for a considerable length of time those surface elements have an opportunity to cool in the air before they come around and are contacted or contact themselves in the intermeshing engaged position; so that there would be a number of factors that would have to be considered in even making a guess as to how long it would take to heat dangerously, that is enough so that there would be a large element of wear as a result of the heat.

Q. Would the continual forcing of these discs in facial contact wear the discs themselves so as to produce shoulders beyond the point where the interlapping takes place?

A. It would in time, bound to.

Q. I didn't notice that you mentioned anything about finding any shoulders?

(Testimony of Robert L. Rockwell.)

A. I didn't mention anything about shoulders. I did call attention to the fact that where the discs of the defendant's machine were in facial contact, that a reverse bevel had been produced.

Q. Yes, but I mean in the Foster machine. I didn't hear you say anything about finding any shoulder on those that were in such strong facial contact with that powerful spring?

A. That is one of the objections to that type of machine, and every so often it becomes necessary to face these discs so that the cutting operation will continue.

Q. Well, those discs on the Foster machine, had they been faced? Yes, or no, or do you know?

A. I don't know; I know they were in good condition.

Q. But you don't undertake to say, though, who put them in that particular condition?

A. No, I am not informed as to that.

Q. Now isn't it true that assuming a machine—we will say like the Rafter machine, where you strove to have it in facial contact—in ordinary practice it is practical to have these ninety-two or ninety [105] odd interlapping discs each and all in facial contact? Is it a mechanical, reasonable, practical proposition to have that?

A. Yes, certainly; simply a matter of precise construction, that is all.

Q. And will the wear be such as to maintain that situation respecting all members of these discs?

A. Some undoubtedly will wear faster than others.

Q. And what will be the result of that?

A. You mean the production capacity of the machine would be increased—

(Testimony of Robert L. Rockwell.)

Q. No, as regards to whether all the discs would be touching or not.

A. Well as soon as the point of contact is relieved on say one pair of discs, it will be transferred to other discs. In other words it would only require a very minute space, so small that it would almost defy measurement, to transfer the pressure from that disc to other discs, and that condition would be going on continually throughout the different elements of the machine.

Q. Now in the Antonsen machine both the lower and the upper spindles were fixedly journaled?

A. Fixedly positioned longitudinally of the spindles.

Q. What was the distance of clearance between the contiguous intermeshing discs on the upper and lower spindles? What tolerance of clearance was apparent there?

A. It would be, according to my recollection, about one thirty-second of an inch, I would judge. That is simply my judgment. I didn't actually measure it. There was very apparent separation; I would judge it to be about one thirty-second of an inch.

Q. So that we get it: The difference between what we call the Foster machine and the Antonsen machine, is that one had a fixed clearance rigidly maintained respecting longitudinal relation, about one thirty-second of an inch; that was the Antonsen machine. And the other machine, there was an elimination of this clearance of one thirty-secondth of an inch, and in fact facial contact except [106] as there might be some displacement caused by the compression spring. Is that right?

A. That is correct with reference to those two elements. The—

Q. Those are the elements—

Mr. WINTER: Wait a minute.

Mr. FENLASON: Yes; I didn't mean to interrupt.

(Testimony of Robert L. Rockwell.)

A. The Antonsen machine, of course, had other features that I considered very important. The placing of the combs on the discharge side of the spindles, being very important; the use of flywheel as synchronized so the speed of the belt is that of peripheral speed of the spindles. I didn't mention that feature before.

Q. Now these features that you have mentioned have nothing to do with the making of the paper itself, the shredding or the cutting on a point of contact?

A. You say these differences do not?

Q. Let me get at it this way: When did Mr. Antonsen consult you—by the way, have you your records here?

A. Yes, I have my time cards here.

Q. The original time card record?

A. Yes, sir.

Q. Do they show all the visits and calls Mr. Antonsen made on you?

A. Show all the visits and calls Mr. Antonsen made after I was given definite instructions to proceed with application for the patent March 16th.

Q. Of what year?

A. 1926.

Q. How about your record as to your prior conferences with him, etc.?

A. I simply make memorandum references to those in my general calendar pad.

Q. Where is your calendar pad?

A. I have the leaves in question right here.

Q. Did you keep a ledger book of your own accounts, a general ledger? [107]

(Testimony of Robert L. Rockwell.)

A. Well I have a rather abbreviated system of bookkeeping, inasmuch as I do not have very many different clients at one time, so that, like a great many professional men, my bookkeeping system is not what one would consider ideal. I don't carry a—I have a ledger which is rather abandoned, has been for a good many years. I don't keep my records that way; simply make a copy of the invoice and file that in the accounts receivable file, and then when that is paid I file it in the accounts paid file.

Q. Have you any invoices covering your services prior to your permanent employment?

A. Yes, I have.

Q. Will you produce them please?

A. That is a carbon copy of the original rendered Mr. Antonsen.

Q. I have particular reference to the invoice for services rendered by you as consultant, occurring prior to March 18, 1926.

A. That is all included in that statement. As I explained before, when Mr. Antonsen came to me he was without funds, and we simply had an agreement that I was to be employed in connection with the preparation and prosecution of the patent, and in addition to that there is a charge there for consultation service rendered prior to that time; that is all lumped into one invoice. I think it will be evident to anyone familiar with the charges for such service that the amount of the charge there is more than the amount that would be a reasonable charge for the preparation and prosecution of the patent alone.

Invoice marked Defendant's Exhibit "I", for identification.

Q. Now Mr. Rockwell, there is an item here on your statement, or charge, "Preparation and filing fees for excelsior machine and process, application U. S. A. \$235."

(Testimony of Robert L. Rockwell.)

Mr. WINTER: I don't see how counsel can go into those things. It is all right for you to fix dates.

COURT: I think he has a right to examine this witness as to [108] his relation; might bear on his credibility; I can't tell.

Q. You have shown an item there of \$235.00. Now do I understand that \$235.00 is including the services you rendered from 1924 until this time?

A. I didn't render any services for Mr. Antonsen in 1924.

Q. Didn't you render him services in 1924 and 1925?

A. No.

Q. Then the first service you rendered him was beginning in March, 1926?

A. No, February of 1925.

Q. Oh you did render him services in 1925?

A. I did. Consultation service only.

Q. Consultation service only?

A. Yes.

Q. You saw him in February, 1925?

A. And may I amplify that by saying that that consultation service was simply of an advisory character in connection with his experiments. That is all. I did not design any machine for him.

Q. He came up to your office, I understand?

A. Yes.

Q. Did you make a record of those visits?

A. It is on the calendar pad, that is all.

Q. May I see those calendar pads?

A. Yes, they are my time cards.

Q. I notice that this Antonsen luncheon is in red pencil. I hope that didn't denote that you paid the bill?

(Testimony of Robert L. Rockwell.)

A. No, Mr. Antonsen paid for the luncheon. I would like to emphasize that at that time there was certainly no occasion for making a charge. Mr. Antonsen simply unburdened himself, so to speak, while we were at luncheon. He paid for the luncheon. He asked my advice in connection with his experiments, and assured me that I would get the job of preparing and prosecuting the [109] patent application.

Q. Now did you see him other than—on other occasions other than as shown here by your memorandum or your day book leaf, the 4th of February, the 6th of February, 1925, and the 14th of July, 1925?

A. I may have, but I have no way of definitely fixing the dates. I recall distinctly that he did call me on the telephone on occasions.

Q. Didn't Mr. Antonsen employ you to make a search respecting the Rafter patent?

A. No.

Q. Did you advise your client, Mr. Antonsen, to save any samples of the machines—of the paper excelsior made on the Foster machine?

A. Well I may have, but I don't recall the details of our conversation. It is a long time ago. I did urge him, of course, to in every way protect his position, and I was particularly impressed at the time he consulted me with reference to his experiments, that he wasn't satisfied in his own mind that he had developed the machine to a point where he wanted to go ahead either with the manufacture of it, or the patenting of it as it was in his mind at that time.

Q. Now coming to the Rapp-Blumfelt machine, it has a pair of spindles and rotating shredding discs in multiple mounted thereon; is that right?

(Testimony of Robert L. Rockwell.)

A. Yes.

Q. And both upper and lower discs are rigidly fixed or journaled so as to prevent movement in a longitudinal direction; isn't that correct?

A. Now it is my recollection that there is a spring on the Blumfelt & Rapp machine also.

Q. Are you sure about that?

A. That is my recollection of the machine that I saw at Frederick & Nelson.

Q. In the Rapp & Blumfelt machine are not the spindles held in fixed position, both the upper and lower spindles, in relation to [110] each other?

A. No, my recollection is that there was a spring employed to keep them in facial contact.

Q. Now you examined the machine out here at Mr. Hedrick's place?

A. I did.

Q. I will ask you did that machine have a compensating member upon one or both of the spindles to permit of the longitudinal movement of either one or both of the spindles relative to each other and relative to the supporting frame in which the same are journaled.

A. By compensating member I take it you mean a spring?

Q. Yes.

A. Yes, there was a spring for that purpose.

Q. Sir?

A. There was a spring that urged one of the spindles, the upper spindle, toward the edge side of the discs on the lower spindle.

Q. Was there a longitudinal movement of the spindles having

(Testimony of Robert L. Rockwell.)

a yielding member disposed thereon when the machine was running at regular load?

A. I didn't notice that particular feature under abnormal conditions. I saw that there was a movement.

Q. You would only have to have a displacement of one thirty-secondth of an inch in order to give the separation which you have in the Antonsen machine. Isn't that true?

A. That is true, but it is very noticeable; that one thirty-secondth of an inch is very noticeable.

Q. Did you observe by hearing, or otherwise, any particular phenomenon when the machine out there was in operation, and did you make any observation, or notice any difference in the operation noises developed when the machine was running light packs of sheets, or heavy pad paper, to shred?

A. Yes, there is difference in the noise. [111]

Q. Were you conscious of a snapping noise at the conclusion of the feeding of a heavy packed sheet of papers?

A. Yes, I recall a clicking noise.

Q. And in your judgment was that not due to the action of the spring?

A. I would say that was probably due to the action of the spring.

Q. And was it not caused by the action of the spring springing against some source—members which had been previously separated?

A. Yes, there were two sets of discs that I noticed, particularly at one end, which were in facial contact; that noise could have been made by those being separated and coming together again.

Q. You noticed paper running through this at the time before the click took place, didn't you, in making paper excelsior?

A. Yes.

(Testimony of Robert L. Rockwell.)

Q. And did you observe any smooth edge on the paper excelsior made at that point on the machine?

A. Yes, I noticed particularly that it was very much smoother than it was at the other end of the machine, where the discs were not in facial contact; I noticed that particularly. But I would like to call attention to the fact that those discs are not sharp, and they do not have a proper seat there for a true cutting operation. As I have emphasized before, they have been allowed to wear until there is a reverse bevel at that particular point.

Q. You didn't call that reverse bevel to our attention when we were out there Mr. Rockwell? Yes, or no?

A. No. I did call the Court's attention to the fact that those were in contact, and that I would have something to say about that in connection with my testimony. That was a feature that I am emphasizing at this time.

COURT: I don't think he was under any obligation to make an exposition out there.

Mr. FENLASON: I don't think he was, either. [112]

Q. Did you select a sample of that excelsior which you have mentioned was cut more smoothly than the other?

A. No I did not.

Q. Do you contend that the excelsior which you referred to was cut excelsior, as distinguished from torn excelsior?

A. No, I would say that the way the machine is—that is, that the machine in the condition that it is at the present time, and operating as it does, it produces torn excelsior.

Q. And as to all parts of the machine? Yes or no; then you can explain.

A. No. I would like to modify that by saying that in these two discs that are in contact when the amount of material that is fed through is—well, put in a small number of sheets, it might be

(Testimony of Robert L. Rockwell.)

more nearly a torn excelsior than in the other parts of the spindles, but discs are not in proper condition to produce cut excelsior.

Whereupon proceedings herein were adjourned until 10 o'clock tomorrow morning.

Friday, April 28, 1933, 10 A. M.

ROBERT L. ROCKWELL resumes the stand.

Cross Examination continued.

Questions by Mr. FENLASON:

Mr. Rockwell, assuming that in the machine which you inspected, which is known as the Foster machine, that four or five sheets of paper, pages of paper, would cause a separation of the springs, would it not be true that the lesser number of pages of paper would cause a separation in the machine which you saw yesterday, the Hedrick machine, having, as you said, a lighter spring?

A. This is an assumption that does not exist in fact.

Q. I am asking you, as an expert.

A. But if that did exist in the other machine, then in my opinion it would be very doubtful if in this machine, with only two discs [113] in facial contact, there would be any decided separation, because the concentration that is on those two discs and the separation would have to be effected by the force exerted by the paper against the pressure of the spring through those two contact surfaces. That I claim is not a comparable situation.

Q. Well assume that all the discs were in facial contact. If they were all in facial contact then would you require a greater or less number of pages of paper?

A. Well I would like to call your attention to the fact that

(Testimony of Robert L. Rockwell.)

we observed in this machine that we had reverse bevel on the discs, and for the purpose of comparison I think we should put our hypothetical problem on an even basis. The machine that I saw in Seattle, which you have referred to as the Foster machine had straight edges on the cutting sides of the discs. On the machine that we have here we have a reverse bevel, due to wear. That sets up a very much different set of conditions, and the two machines are not directly comparable because of that difference in these surfaces.

Q. You say that is due to wear. That is due to the natural abrasive effect, I suppose, of paper being run through the machine?

A. No, I think that is a very small contributing factor to the wear in that particular case. Here we have the thrusts of this spring concentrated against two sets of discs in facial contact, which does not exist in the ordinary cutting machine. The thrust of the spring under those conditions is distributed over all of the discs which are in facial contact.

Q. And if it is distributed over all of the discs which are in facial contact, and they being all of the discs here, will you have a condition here of beveled back edge appearing?

A. After a long period of time; they would have to wear, of course, to that extent.

Q. That would be natural wear, would it not? [114]

A. Well, I would say that would be a very unnatural condition, because in a cutting machine the purpose of the machine is to cut; as soon as the discs become dull, why naturally they proceed to sharpen them.

Q. Just answer this question, please. Would that beveled back be a natural result from the thrust of the machine?

(Testimony of Robert L. Rockwell.)

A. Yes, yes, surely.

Q. And that natural result in the use of the machine, would it cause the tips to be out of facial contact?

A. The tips themselves would not be in facial contact, no, with reverse bevel.

Q. Then because of this reverse bevel resulting from—which would result from the ordinary use of the machine——

A. I beg pardon, I think that is a rather wide statement.

Q. Didn't you state that the reverse bevel would result from the ordinary use of the machine in operation?

A. Yes; it would be a very unordinary condition, though, to ever let it go in that condition.

Q. It would result from the use of the machine in ordinary operation? Yes, or no?

A. Yes.

Q. All right.

A. If the wear was allowed to continue to that extent.

Q. And if the wear was allowed to continue to that extent, then the cutting edge, or whatever you desire to call it, would be out of facial contact. Is that correct?

A. The edges themselves would not be in facial contact.

Q. So you would have the same departure from facial contact that we have in the Antonsen machine?

A. Not the same, no sir.

Q. You mean by not the same, that you might not have the same degree of separation? [115]

A. No, it is an entirely different mechanical setup, entirely different.

Q. At any rate the shredding edges would not be in facial contact, would they?

A. I concede that.

(Testimony of Robert L. Rockwell.)

Q. And not being in facial contact would they cut or tear excelsior?

A. There would be a tendency for a very poor job of cutting, likewise there might be a tendency for a very poor job of tearing. It would be neither good tearing or good cutting.

Q. All right; we would have neither good cutting nor good tearing. Now respecting the resulting product itself, what would be the result as respecting the edges of the produced excelsior?

A. The edges would in my opinion be rather rough, but straight along the edges of the product.

Q. Rough but straight?

A. I mean by that the general contour of the strip would be straight, but the edges would be a little ragged.

Q. Assuming, when that condition resulted so as to produce the rough edges, you say, that the feed put in there of the paper was of sufficient thickness to actuate the spring and cause a further separation, what would be the attendant result as reflected in the edges of the manufactured excelsior.

A. They would become rougher. The degree of roughness would be increased.

Q. And you would also have a scalloped condition, would you not? Yes or no? Yes or no, and then explain.

A. Yes. If we understand by scalloping we mean that roughness which occurs when imperfect cutting is performed.

Q. And the time of the appearance of this back bevel on the discs would depend, would it not, upon the material of which the discs were composed, and the pressure by which they were maintained in facial contact? [116]

A. Yes, the material of which they were composed, the pressure of the spring, and also the hardness of the material. You can take ordinary soft material and by case hardening produce

(Testimony of Robert L. Rockwell.)

a hard surface which will stand a tremendous amount of wear before there is any deterioration of that cutting edge.

Q. Now what kind of material went into the Wheeler machine, as respects the shredding discs?

A. The Wheeler machine?

Q. Yes; that is the machine that you saw down at Mr. Hedrick's place.

A. No, I didn't have an opportunity to test that.

Q. Now you inspected two machines, as I understand it, the Antonsen machine, and what we have identified as the Foster machine.

Q. Did you inspect any others?

A. The Blumfelt & Rapp.

Q. And did you inspect any others?

A. I inspected parts that were being made for Mr. Antonsen at Walter Swarfver's shop.

Q. Did you inspect the entire completed machine?

A. Not at that time, no.

Q. And of course prior to that time you had made no inspection at all?

A. No.

Q. Now I will ask you please to exhibit this Exhibit H, for identification. Do you observe the photograph there showing the machine in operation, and the resultant product upon the floor?

A. Yes, sir.

Q. As regards the position of the paper excelsior as reflected by that photograph, will you explain what difference there was in the paper excelsior position at the time you observed—at the time you inspected the Antonsen machine, which was in 1925, I believe. [117]

Mr. WINTER: I object to that as not proper cross examination.

(Testimony of Robert L. Rockwell.)

COURT: Well he can explain as to the situation in which he found the plaintiff's machine in 1925.

A. I believe I explained that the only machine that I saw in production at Mr. Antonsen's plant was his own production machine.

Q. Yes, I think that is right.

A. The Foster machine we simply operated by hand to run a few sheets of paper through so that I would see that the product produced by Mr. Antonsen by his production machine was more fluffy in the manner in which it piled up on the floor, than is the product shown in this picture. This is a newspaper reproduction, and it is not very clear, but it seems to be sufficiently clear to definitely establish that distinction.

Q. How would you compare the condition of the paper excelsior there as respects the condition of the paper excelsior as it came to rest, which you saw cut the other day at Mr. Hedrick's plant?

Mr. WINTER: I object to that question as improper cross examination.

COURT: Yes; sustained.

Q. Well you term your excelsior which you observed there in the print, as laying up in a haphazard manner?

Mr. WINTER: I object to that as not proper cross examination.

COURT: Sustained.

Q. Now then I believe Mr. Antonsen had some combs upon his machine, didn't he?

A. He did.

Q. He had two sets of combs?

A. Well, he had a pair, one opposite the center of the top spindle discs, and one opposite the center of the lower spindle discs.

(Testimony of Robert L. Rockwell.)

Q. And these combs had kind of saw-edged teeth? [118]

A. Yes.

Q. That inserted into the aperture between the discs?

A. Yes.

Q. And what function did they perform?

A. They performed the function of maintaining the production rate of the machine by preventing the winding of stray strips around the spindle.

Q. And that was the purpose of the comb?

A. That was the purpose.

Q. Did the comb cause a further degree of separation between the severed strips, than would have existed without any combs?

A. There might be a slight effect; but I think the outstanding difference in the product would result in the crumpling of the strips that would be carried by the revolving element into contact with the comb and there stripped off into the pile, so it would really help in making the material more resilient.

Q. Did that contribute to the fluffiness of the appearance of the excelsior as it was deposited upon the floor?

A. I would say insofar as it affected the strips that were crumpled, yes. That is not the major quality in the production by any means. There are some of the strips, however, that do have a tendency to follow the rotating element around; these are caught by the combs and stripped off the rotating members, and of course come off on the stream of material on the floor below.

Q. What amount of separation was there in the Antonsen machine between the contiguous knives or discs?

A. As I said yesterday, I didn't measure it accurately. My judgment is that it would be about one thirty-secondth of an inch, may have been more. I am certain that it would not have been appreciably less.

(Testimony of Robert L. Rockwell.)

Q. Now, Mr. Rockwell, suppose that in what we call the Foster machine, in the upper spindle, and that shredding disc contained [119] on the upper spindle, closest to the end where the spring was located, there had been inserted a washer—a separation washer—having an additional say one-sixteenth of an inch in thickness, what if anything would be the physical result as respects the positioning of the balance of the shredder discs on the upper spindle in relation to the shredding discs on the lower spindle?

A. The adjacent sides would be separated by the thickness—the extra thickness of that washer, I believe you say one-sixteenth of an inch greater thickness?

Q. Yes.

A. The effect would be to separate the adjacent edges by that amount for the balance of the discs on the spindles.

Q. So if you put an additional washer there, say one-thirty-secondth of an inch, then you would have about the same condition that existed in the Antonsen machine?

A. No.

Q. You would have a separation of one-thirty-second of an inch, wouldn't you?

A. Yes, for part of the discs, but not for all.

Q. It would be a separation for all of the discs oppositely with respect to the place where the washer was located, wouldn't it?

A. With the exception of those which were in facial contact because of the pressure of the spring. That condition would exist for all the others, of course.

Q. Well as to those which did exist, you would have a situation like the Antonsen machine, wouldn't you?

A. The space between the edges of the discs would be approximately the same.

(Testimony of Robert L. Rockwell.)

Q. Wouldn't it operate the same way when paper was fed to it?

A. No, it would not; there would be a decided difference.

Q. What would be the difference in that operation? We have one [120] thirty-second of an inch space.

A. I would be very glad to explain that. It is an important thing in this connection. I would like to emphasize the fact that in the Foster machine it was the spring.

Q. Yes.

A. If we have, say, one or two of the sets of discs in facial contact and a space of one-thirty-second of an inch between the other pairs of discs on the shafts, we have a condition which is particularly favorable for wedging which results when the discs are separated and the paper is fed through; then the paper has a tendency to wedge in between the slightly separated edges of the discs.

Q. All right; I don't see that, but go ahead and explain.

A. Oh yes, that is exactly what takes place; that is the logical thing. It is exactly the same thing that results when you take a pair of shears and try to cut several thicknesses of paper, and do not have the edges fair. If we turn them slightly the edges will simply slip off; there is no cutting, and you do have a decidedly wedging action of the shears. Be the same thing. In that connection I observed the same phenomenon in the machine we observed in Portland.

Q. Would not Antonsen's have the wedging phenomenon? The degree of separation there is only one thirty-second of an inch.

A. That wedging action, but a different degree there.

Q. What is the different degree?

A. The degree is decidedly important because of the fact that in the Antonsen machine the upper and lower spindles are

(Testimony of Robert L. Rockwell.)

positioned definitely in regard to their relation one to the other, while in the other machine there is a spring, and it simply means that with a multiplicity of these thicknesses of paper in between the different discs that spring will be relatively easily compressed; a decidedly different operation; not depending on the operation of this spring by a single set of thickness of paper; we have that multiplied by whatever number of discs that are not in facial contact. [121]

Q. The example we give was that we have a spread, now we will say in the Foster machine, of one thirty-secondth of an inch, and they are all spread except say towards the spring side, the last three sets of discs.

A. Well by the spring side I think we ought to definitely determine whether that is a compression spring, or just how that spring is to function.

Q. Well you saw the spring, and how did it function?

A. It functioned as a compressing spring; if we have the discs in facial contact under these conditions, it would be somewhat different than if the setup were on the other end of the machine, as I visualize it at the present time.

Q. Well Mr. Rockwell, if we had that one thirty-secondth of an inch separation there——

A. There would be no——

COURT: Just a moment. Let counsel ask the question.

Q. If there were that one thirty-secondth of an inch separation that we have discussed it wouldn't close into facial contact would it, on the balance of these shredders?

A. No.

Q. So you would always have that separation, wouldn't you?

A. Yes—I beg pardon—we would have always have that separation until some force would act on the spring there to increase that separation.

(Testimony of Robert L. Rockwell.)

Q. That is right. But you would have a minimum separation?

A. Minimum. We would have a minimum separation, yes.

Q. Would have minimum separation, which is the same thing that you have in the Antonsen machine, only it is a fixed separation. You claim that because you have the possibility of a greater separation that it wouldn't manufacture torn excelsior? Is that the idea?

A. No, no, I didn't say that. [122]

Q. Would it have a greater tendency to wind up in the spindles than to tear?

A. No, I don't think it would have a greater tendency to wind up in the spindles, when the separation was maintained. You will probably notice a greater tendency where the discs were in facial contact, though.

Q. That would be that it follows the discs, under the proposition assumed here?

A. Yes.

Q. Until you fed a sufficient thickness of paper, or actuated the spring and caused the additional spread. As to the discs not in actual contact, you would have the same situation as you find in the Antonsen machine. Isn't that right?

A. You mean in the balance of the discs not in facial contact?

Q. Yes.

A. Up to the time where there would be no spread, yes.

Q. And when you reached the point where there was spreading, then you would have a greater ruggedness or roughness reflected in the edges of excelsior passing through these expanded apertures?

A. You would have a condition——

Q. Answer my question yes or no, and then explain.

A. My answer is no.

(Testimony of Robert L. Rockwell.)

Q. All right.

A. I explained that a little while ago. If you wish, I will go into it again.

Redirect Examination.

Questions by Mr. WINTER:

Mr. Rockwell, the machine, the defendant's machine that was examined yesterday, there were some of these discs that were not in facial contact?

A. Yes.

Q. Where were those discs located with reference to the spring? [123]

A. On the opposite end of the spindle from the spring.

Q. How many of those discs were in facial contact?

A. Apparently there were two which could be definitely identified as in facial contact.

Q. On cross examination you said something about increasing the size of a washer between the discs. Now could you tell us how the machine we saw yesterday—how that was adjusted so that it would operate with two discs in facial contact, and the rest of them being apart?

A. I would like to state that I have no way of checking that definitely. It could be done in several different ways, either by using thicker discs on one of the spindles, or thicker washers, or by putting in one thicker washer on one of the spindles.

Q. If you were going to do it by one washer, where would you place that washer?

A. Inwardly from the two discs being maintained in facial contact on the ends on the upper spindle. I would like to amplify that just a little bit. It is my recollection that because of the location of the spring the intermeshing edges were such that the discs on the upper spindles were on the spring side of the

(Testimony of Robert L. Rockwell.)

discs on the lower spindles. I would like to amplify that statement that I made, to that extent.

Q. It would have to be that in order for the spring to function, wouldn't it?

A. That is my recollection, yes. May I make just a little sketch here? (Witness draws) The assumption that I made before, that the discs on the upper spindle were on the spring side of the discs on the lower spindle, is incorrect. It should be the reverse of that, with a compression spring, so that if we were to use a single washer to change the spacing between all of the other discs on the spindle except two, the logical place to put that would be on the lower spindle. I think that answers the question. [124]

Q. Where on the lower spindle would you put it?

A. Next to the two sets of discs that were to be maintained in facial contact.

Q. What purpose would there be in permitting the two discs to remain in contact, facial contact?

A. Well with a spring of that character there has to be some means for limiting the longitudinal movement of the shaft actuated by the spring; a shoulder could be used; in this particular case discs would be the simpler expedient of limiting the longitudinal travel of the shaft under the action of the spring.

Mr. WINTER: Now with the Court's consent, I would like to go into a matter that is really rebuttal. Just one or two questions.

Mr. FENLASON: It is agreeable to me, but I would like to finish this recross while it is fresh in my mind.

Recross Examination.

Questions by Mr. FENLASON:

Now in the original Rafter machine—should say the Foster machine which was built by Rafter—could a shoulder be placed

(Testimony of Robert L. Rockwell.)

so as to prevent the spring from bringing the shredding discs into facial contact to assure when not spread by cutting or shredding paper, that the discs be returned to a positive point, and that they would be in a close contiguous relation?

A. So they would be in close condition, but not touching?

Q. Yes.

A. Yes, obviously.

Q. In other words, the construction was not such that necessarily they would have to be in continuous facial contact?

A. No that would not be absolutely necessary. That was the arrangement however in the machine that I observed. [125]

Q. In that same type of machine, if desired, they could have had a degree of clearance between the discs?

A. It could be designed to accomplish that, surely.

Q. You didn't see any other machine built by Rafter, did you?

A. At that time, no.

Q. Now in your explanation, putting in the additional washer to make the spread between all the remaining discs, if such were accomplished, then you would not have, would you, any back bevel upon the balance of these discs?

A. That were not in facial contact?

Q. Yes.

A. No, except just a little rounding of the edge there due to the tearing of the paper.

Q. You don't claim that any additional discs have been inserted in the machine you inspected here, for the purpose of creating separation, do you?

A. What is that?

Q. Read: ("You don't claim any additional discs have been inserted in the machine you inspected here, for the purpose of creating separation, do you?") I should change that to washer.

A. Any additional washers?

(Testimony of Robert L. Rockwell.)

Q. Yes, have been inserted there to change the relativity?

A. I didn't inspect it for anything of that kind.

COURT: I think that was counsel's assumption.

Mr. FENLASON: Yes, it was my own.

Redirect Examination.

Questions by Mr. WINTER:

Mr. Rockwell, you stated yesterday that the plaintiff Antonsen visited you February, 1925?

A. Yes.

Q. Can you fix the date?

A. I can by referring to my Gem Calendar; that was February 4th. [126]

Q. February 4th; what year?

A. 1925.

Q. At that time did Mr. Antonsen make a disclosure to you of his new invention?

A. Yes, sir, about the first time he did.

Q. Tell the Court what he disclosed.

A. He told me that——

Q. First, if I may suggest reference to the machine itself.

A. Yes. The machine that he had been experimenting with, and he wanted me to help him develop, was an experimental machine for the production or at least to form the basis for the production of a machine to manufacture torn paper excelsior. Mr. Antonsen described this machine as consisting of a wood frame re-enforced at the connection points by means of angle irons. On one end of that was located a shredder head, which consisted of two journaled spindles each carrying a plurality of beveled edge discs alternating with spacers. The arrangement being such that the edged side of the discs were adjacent but not

(Testimony of Robert L. Rockwell.)

touching. Gears were fixedly attached to the two spindles so that they would rotate in opposite directions at the same speed; drive pulley attached to one end of the spindles. The spindles were axially fixedly positioned by means of adjustable lock nuts and washers, so that a space was at all times maintained between the contiguous edges of the discs on the two spindles. That briefly is a description of the essential features of the machine.

Q. Did he state anything at that time, or make any disclosure, with reference to what he was to produce with that machine, and how; what it was to be used for?

A. Yes; his original experiments were along the line of cutting the paper to produce cut paper excelsior, but on one occasion when he had taken out the discs to change the bevel slightly in connection with his experimental work, and reassembled the discs on the spindles, and positioned the spindles in their respective bearings, he in- [127] advertently set up the adjustment nuts so that a space existed between the contiguous sides of the discs on the spindles. Without noticing that he had made this change he ran some paper stock through and to his amazement the paper went through with exceedingly small effort. He then naturally concluded that it was because of the change in the bevel on the disc, but on closer examination he found that they were not in contact at all, and when he tried to put more paper through it went through with very little more effort; and as a result of his experiments he found that the machine with this slight change was able to produce with one movement of the stock—that is, he carried through about three times as much stock as he was ever able to get through the machine with his other experiments. He found on examination of the product that he had an entirely different product. Instead of the strips coming out and settling one on top of another in flat relation, the strips were distorted

(Testimony of Robert L. Rockwell.)

and they piled to make a very resilient mass, just the way they came from the machine. And he analyzed that and was amazed at the tremendous change that there was in the resulting product, and it was the result of that discovery that led him to continue further and see if further changes in the shape of the discs would contribute to the production capacity of the machine, and he wanted my advice as to that. I suggest that he go over the different types of discs that he had employed, and from his previous knowledge determine which had, for a cutting operation, given the best results; then select the one which appeared to work the best for cutting, and see if that made any difference, as compared with the discs that he had used when he made the original discovery. That was practically the substance of our first consultation, in which he disclosed his machine.

Q. Did he at that time describe to you the product that he had produced?

A. Very definitely. [128]

Q. What did he say in regard to that?

A. Well, he said that the edges instead of being sharp and clean cut, were irregular and feathery, so that a person could grasp this and would be in no danger at all of cutting the hands, and that the product was so superior that he felt that he had made an outstanding discovery. He had been working with paper excelsior for a long time with the cutting machine, but that he was absolutely convinced that this product was far superior to any that he had ever produced up to that time.

Q. Was the description that he gave you of the machine that he thought or claimed he had invented, and of the method of manufacturing this product sufficient to have enabled you to construct the machine and produce a product?

A. Oh very easily, from his description; no trouble at all.

(Testimony of Robert L. Rockwell.)

I forgot to mention that he explained that this was not a full sized machine, but a narrow machine, which he used, because he didn't have to work over so many discs in connection with his experiment.

Q. You say a narrow machine. Did he indicate about how wide it was?

A. Well I don't recall the exact dimensions.

Q. You may state whether or not the process which he disclosed to you was a cutting process?

A. No, it was a tearing process.

Recross Examination.

Questions by Mr. FENLASON:

Now did he make any of the disclosures to you on the 4th of February, 1925?

A. Yes.

Q. And that was the time that you had the luncheon engagement?

A. Yes.

Q. And did he exhibit to you any sample of the excelsior?

A. Not at that time. [129]

Q. Did he take you out and show you this machine?

A. No, not at that time, nor at any other time. I never did see the machine.

Q. You never did see that?

A. No. I never saw it. I would like to.

Q. Then everything—then the disclosures he made there were practically inclusive of everything that is disclosed in his patent application, which he made a considerable time later?

A. As far as the process or elements involved in the actual execution of the process is concerned, yes.

(Testimony of Robert L. Rockwell.)

Q. Did he have two spindles mounted in a frame?

A. Yes.

Q. And he had beveled discs on the spindles?

A. Yes.

Q. And he had beveled discs separated by washers?

A. Yes.

Q. And he had them fixedly journaled in the frame members so as to prevent longitudinal movement?

A. Yes.

Q. And he had separation between the contiguous intermeshing shredding discs. Is that right?

A. Yes.

Q. And he disclosed all of that to you on February 4th, 1925?

A. Yes. I would like to amplify that statement in this way. Mr. Antonsen is by nature very reticent——

Mr. FENLASON: I object to that as a conclusion.

COURT: Yes, stricken.

Q. When did you see Mr. Antonsen next, after February 4th?

A. On the 6th of February.

Q. And when did you see him next?

A. I can't fix the dates of the next calls, because he simply reported then in regard to the results that he was achieving by [130] making certain changes in the discs. He was continually aiming at more production.

Q. When did you see him, Mr. Rockwell? A am asking when you saw him?

A. I beg pardon. I saw him later, I am sure, in February, but I cannot fix the dates.

Q. Have you any record of that?

A. I have no record of that, no.

(Testimony of Robert L. Rockwell.)

Q. When next did you see him, that you have a record of?

A. That I have a record of, was July 14th.

Q. Of what year?

A. 1925.

Q. When next did you see him?

A. The next definite record that I have was on March 16, 1926.

Q. March 16, 1926. That is more than a year after the time that he made the complete disclosure to you. Is that right?

A. Yes.

Q. Now did you make any notes of what he told you at this first time?

A. No, because he——

Q. I am asking you, did you make any?

A. No, I did not.

Q. And what you testify to here is from memory?

A. Yes.

Q. And you remember that that is the conversation that took place on February 4th?

A. Yes.

Q. I suppose that when he consulted you on the 16th of March, 1926, he told you about the same thing?

A. No. He said that he had perfected the machine to a point where he wanted to go ahead and apply for his patent.

Q. During this intervening time you had never seen his machine, [131] had you?

A. No, I had never been in his plant.

Q. Did you advise him to preserve his working models? Yes, or no?

A. Yes I—if I didn't definitely state that I am sure that I inferred it.

(Testimony of Robert L. Rockwell.)

Q. Have you talked this over with Mr. Antonsen as to what he said to you on that first occasion?

A. No, I never asked him what he said to me.

Q. I say, have you talked it over?

A. No I have not, not as to what he told me.

Q. You and Mr. Antonsen haven't discussed that?

A. No, we haven't.

Mr. FENLASON: That is all.

Redirect Examination.

Questions by Mr. WINTER:

At the time when he was there, February 4, 1925, I think it was, was anything said about comb plates?

A. Not at that time.

Q. Was anything said about that later?

A. Yes. When we got ready to proceed with the application for the patent, that was pointed out as one of the improvements that he had made during the interim.

Mr. WINTER: That is all.

COURT: You examined the machine of the defendant on yesterday and saw the product which was produced there. What difference, in your opinion, is there between that product and the one produced on plaintiff's machine, for which patent has been obtained?

A. Very little difference, Your Honor. The regular production product turned out by Mr. Antonsen, that perhaps has more featherly edges; the edges are not so true and well defined as in the defendant's particular machine, except over at the end of this [132] machine, near the spring. I notice that on that end of the machine the product was very, very similar to that produced by the Antonsen production machine; by that I mean similar with respect to the edges.

(Testimony of Robert L. Rockwell.)

COURT: That is, you say closer to the spring it was more like the plaintiff's product?

A. Yes.

COURT: And down where the two were in facial contact in your opinion it was more like the old cutting machine?

A. Yes.

COURT: As far as you could observe by looking at this machine, how has the similarity in result obtained, differentiating it from the Foster machine that you saw?

A. In the Foster machine all of the discs were in facial contact so that there was a true cutting action. In this case with the exception of two of the discs, the adjacent discs are maintained in separate relation, so that there is a true tearing in this particular machine, whereas in the other there was a true cutting operation.

COURT: In your opinion the result that might be obtained in the Foster machine is the result of wear and depreciation alone?

A. I do not think so. I have never seen a machine that has been used as a cutting machine operate to that extent, but it is my opinion that it would not, by just ordinary wear, reach a point where it would produce a true torn paper excelsior. It is a very unfavorable condition. The tendency, as wear takes place in the discs when they become dull, is for the machine to clog, and the natural result for the operator, of course is to take out his discs, face them off so he can obtain a true cutting relation, and the result is a more economical production.

COURT: The more careless he was, the closer he would come to invention. [133]

A. I don't know as that would necessarily follow. I have never operated one of those machines in production, but I can't see how a machine that is properly adjusted with all of the discs

(Testimony of Robert L. Rockwell.)

in contact, could wear enough to produce a truly torn paper excelsior. Now I would like to amplify my statement, Your Honor, that I made yesterday in regard to wear between the edges: Where we have two discs, with only part of the edges interlapping, you have here a rotating in opposite directions; we get a distance here where the passage of any elemental portion, say marked A and B, (Plaintiff's Exhibit 6) past a line through the centers of the discs, will rub relative to each other only the distance of the laps. The reason for that is they are working forward at the same rate; it is a rolling motion, not a rubbing motion; they simply roll together, so that these two faces here simply slip by each other; so the elements A-B in passing to positions A'-B' pass the center axis X-X so slide relative to each other only the amount of the lapped distance of the discs which we will designate by the distance "L" in the sketch. It is very much the same action that we have in a pair of shears. The edges of the shears will work past each other for a long time without a great amount of wear, and the same is true here. It is a true shearing operation.

COURT: In your opinion could the result which you find in the defendant's machine be simply—be obtained simply by lessening the tension on the spring?

A. And just leave it loose?

COURT: Yes, lessening the tension on the spring to such an extent there is some play between elements at the time the paper goes through.

A. In my opinion, Your Honor, if that were done the machine would become inoperative because of the fact that without the discs being maintained in some definite relation by means of the spring, the spindle would have a tendency to drift to such an extent that it [134] would not be in condition to operate effectively.

(Testimony of Robert L. Rockwell.)

COURT: I don't mean taking the tension entirely off, but taking the tension to such a degree that it would likely hold the discs in facial contact but would yield to the pressure of the paper going through?

A. I think I see what you mean. Now the situation would change distinctly with the amount of material that is fed through. A few sheets of paper with edges in contact would obviously be cut, because there would not be enough force to shift the spindle. If we increase the number of sheets we would reach a point where we would experience the characteristics of a cutting machine; in time the machine would clog, the paper would have a tendency to slip in between the discs and lock the spindles. We have experienced that time and again on cutting machines where a machine is forced; where an effort is made to force it to give more production. So I am of the opinion if such a thing is done it would result in such an unfavorable operation of the machine that the operator would immediately correct it.

COURT: You don't think that the same result could be accomplished by simply allowing the tension on the spring to lapse to a certain degree and the faces to become worn by operation?

A. Well, Your Honor, if you will recall, there are two of the discs on the two spindles that are in actual facial contact. If the machine had not been changed that wear would be evidenced in all of the other discs as well, and that was not observed. The wear was found to be on only those discs which were in facial contact; the others were not in contact at all, and had no evidences of side wear. It has all the appearance of the machine having been purposely changed to avoid that facial contact for the balance of the discs on the spindles, with the exception of the two that were maintained in facial contact, to a definite fixed longitudinal movement of the upper shaft, due to the urge of the spring. [135]

(Testimony of Robert L. Rockwell.)

COURT: And that you say was not the condition of the Foster machine?

A. The one I observed in Seattle?

COURT: Yes.

A. No, sir, the discs were all in facial contact.

COURT: Of course you don't know whether this was done—this change was made by the original manufacturer or by someone else?

A. No, I don't know how it was done.

COURT: In any event it is your opinion it could not have been brought to the present shape simply by inaccurate operation and wear of the disc?

A. No, sir; absolutely positive in my opinion, as far as that is concerned.

Q. (Mr. Fenlason) What change in your opinion has been made in this machine that you examined, to create the condition that you found there?

A. Well I haven't had an opportunity to examine that critically, but any one of three changes could have been made to achieve that result. I have enumerated them all. I will go into them again if you like.

COURT: I remember them.

Q. I remember them. The case put where the tension on the spring is released to a marked degree, and assume that a few sheets of paper being fed into it will cause a separation, would the machine cut or sever that paper being fed through under power?

Mr. WINTER: What is that question?

(Question read)

A. That is a hypothetical instance that does not exist in practice, to my knowledge; that a few sheets of paper would

(Testimony of Robert L. Rockwell.)

force a separation there and the edges were sharp, we have one condition; if they are dull, we have another.

Q. If they are sharp, what condition will you have? [136]

A. If the material being sent through causes a separation there would be in my opinion both cutting and tearing.

Q. And if the blades were dull, what would you have?

A. Well, if the blades were dull and under this hypothetical condition where it actually causes a separation, the obvious conclusion is that it would be torn; but we have no experience to maintain such a hypothesis.

Q. The only experience you had was on the one occasion?

A. Oh, no, I have had lots of experience with machines since that.

Q. Let me ask you this question: You saw the Foster machine: In your opinion would the Foster machine produce torn excelsior if it were operated in ordinary course with multiple or five pages of paper, or more pages, being run through that machine?

Mr. WINTER: As far as pages, couldn't do that very well, would have to split a sheet; six.

Q. Well make it three sheets.

A. Read the question.

Q. Well I will reframe it. Would the Foster machine, which you saw, tear any excelsior if four sheets or more sheets of paper were fed through it in the ordinary course of practical operation?

A. No. May I amplify that? We tried that and found that when it stopped cutting the machine clogged. That is all there was to it.

Q. Now let me ask you this: Assume now that the Foster machine at one time did tear the paper passing through it when

(Testimony of Robert L. Rockwell.)

the paper was fed into it four pages or more in thickness, would you say there was a change in condition between the Foster machine at that time, and when you saw it?

A. Yes, certainly.

Q. In the Foster machine such as you saw it, did it have means such as a collar, for limiting the longitudinal shifting which would be effected by the pull of the spring?

A. No, the discs themselves perform that function. The spring [137] wedged the discs into facial contact.

Q. Didn't it have an adjustable collar situated on the spindle opposite to the spring, on the other side, capable of adjustment which could control the degree of pulling of the spring.

A. That was on the outboard end of the shaft, but that did not limit the direction of motion in the direction of urge of the spring; that was limited by the discs on the other shaft.

Q. Was it adjustable so it could limit the urge of the spring?

A. The tension of the spring itself could be adjusted, yes; there was a nut and lock nut that could be adjusted to adjust the tension of the spring, but that was outboard of the bearing.

Q. Yes; but the other bearing on the upper spindle, did that shaft have any collar on it, or anything?

A. No.

Q. You have a clear recollection of that?

A. Yes, I have, because it was free to move in that direction.

COURT: Will you adopt this drawing as one of your exhibits, as illustrative of what the witness testified to?

Mr. WINTER: Yes.

Drawing Marked PLAINTIFF'S EXHIBIT 6.

Recess until 2 P. M.

(Testimony of Robert L. Rockwell.)

Tuesday, April 28, 1933, 2 P. M.

ROBERT L. ROCKWELL Resumes the stand.

Recross Examination continued.

Questions by Mr. FENLASON:

Do you know the kind of material that was used by Mr. Rafter as washers, used between and to separate the discs?

A. In the machine that I saw in Seattle it is my recollection that it was fiber.

Q. And did you take the machine apart to examine how many fiber washers, if there was a plurality of washers, were inserted between the discs?

A. No.

Q. Are these fiber washers manufactured to close limits as respects uniformity, or is there a variation?

A. Fiber as a rule does not come to very close limits, but it is very easily ground to very precise dimensions.

Q. Ground you say?

A. Ground, yes; that is the preferable operation.

Q. Did you examine the discs upon the Foster machine to determine whether or not there were any variations in the metal discs themselves as respects thickness?

A. No, my check was a visual check only. I was particularly interested in noting whether the discs came into facial contact or not.

Mr. FENLASON: I will offer Mr. Rockwell's bill.

Marked DEFENDANT'S EXHIBIT "I".

Witness excused.

RONALD CAPPS,

a witness called in behalf of the plaintiff, being first duly sworn testified as follows:

Direct Examination.

Questions by Mr. PIERCE:

Where do you live, Mr. Capps?

A. Seattle.

Q. How long have you lived in Seattle?

A. About twenty years.

Q. Do you know Mr. Antonsen, the plaintiff in this case?

A. Yes, sir.

Q. And how long have you known him?

A. About fourteen years, I believe.

Q. On what occasion did you come to know him? How did you come to know him? Just explain how did you come to know him?

A. I used to go to the same Sunday School as his brother-in-law and we got quite friendly, and I used to go over to his house, and [139] it is there that I met Antonsen.

Q. This brother-in-law was what approximate age, in relation to your own?

A. About three months younger, is the only difference.

Q. Did you ever have any more relation with him that merely knowing him through going to the house?

A. Well I worked with him.

Q. On what occasions?

A. My first connection with any salary connected was selling papers for him.

Q. What newspapers was that?

A. The evening paper, Times, and Star, and Union Record, at that time.

(Testimony of Ronald Capps.)

Q. Did you ever work with him in connection with the P. I.?

A. Yes, I used to help him with the P. I. boxes, but wasn't any salary for that. That was more just for fun.

Q. What were the P. I. boxes you have reference to?

A. The boxes they have on the telephone poles, or street car poles, to eliminate newspaper boys. They put the boxes on the poles and took the papers and paid for them as they got them.

Q. Deposited the coin in the box?

A. Yes.

Q. What did you do in connection with this, did you say?

A. Just go over and stay with Byron, that is Mr. Antonsen's brother-in-law, all night, and get up about four o'clock in the morning and service these boxes; that was a morning paper. They would have to have the papers put in and the old ones taken out.

Q. What did you do with these old ones you took out?

A. Put them in the back of the car until we got home, and then tied them in bundles, and then kept them in the garage until an accumulation.

Q. What garage was that? [140]

A. The garage in back of the house.

Q. Where was it located?

A. I think the address was 5718 "H" N. E. in Seattle.

Q. How would you handle them, you say you tied them up in the garage in that residence place?

A. Yes, sir.

Q. Did you ever have anything to do at any time with those papers after they had been tied in bundles in that garage?

A. Well we would—Mr. Antonsen would keep them there, and whenever they got so many that they crowded, of course he would load them up and take them down town to another place he had there.

(Testimony of Ronald Capps.)

Q. Did you ever assist him in that?

A. Yes, on three or four occasions.

Q. Do you remember at this time where you took those to?

A. Some place on Western Avenue down near the American Can Company; the direct cross street I can't recall.

Q. Do you remember what this place was like that you went to?

A. Well a small building, looked like it might have been an old garage or something; wasn't very large.

Q. Did you go inside this little building?

A. Yes.

Q. What did it look like in there?

A. Just a plain framed building with a couple of windows.

Q. What was in it?

A. He had his papers stored in there and had some machines in the back end.

Q. Some machines. Now did you ever see any of those machines operate?

A. No.

Q. Never saw any of them operate. Did you ever—what time was this, what year was this, approximately, to the best you can remember. [141]

A. Well, about 1921 or 1922, somewhere around in there.

Q. Did you ever notice around this place any paper other than that which was tied in bundles? You said you took this down in bundles. Did you ever notice any paper around there?

A. Well there was scraps, or these paper shreddings, on the floor.

Q. By paper shreddings you mean paper like——

A. Narrow strips similar to that.

(Testimony of Ronald Capps.)

Q. Narrow strips. Did you know—could you describe what the machine was like, the machines that you speak of?

A. Well I recognized one of them as a baler, but the other one I didn't know what it was. I recognized the baler, because we had one at school like that.

Q. How old were you at this time?

A. Sixteen.

Q. How many times did you go down there?

A. Oh I don't remember now. It may have been a dozen times or so, or less.

Q. You don't have any definite recollection?

A. No.

Q. Was it part of any of your duties at all to go down there?

A. No.

Q. You weren't receiving any compensation for that?

A. No.

Q. You are familiar now with what is known as paper excelsior, what is called paper excelsior?

A. Yes.

Q. These strips that you refer to that you saw around on the floor there, to the best of your recollection, were those approximately the same thing as these strips that you see in excelsior now?

Mr. FENLASON: I object to that as calling for a conclusion. I think he should describe what he saw, Your Honor.

COURT: Objection sustained. [142]

Cross Examination.

Questions by Mr. FENLASON:

You live in Seattle now?

A. Yes.

Q. Are you employed now?

(Testimony of Ronald Capps.)

A. Yes.

Q. For whom?

A. By the Pacific Coast Container & Excelsior Company, and Western Containers.

Q. Those are Mr. Antonsen's companies?

A. The Pacific Coast Container Company is; the Western Container, that is a separate corporation entirely.

Q. Does he have any business relation with that company?

A. He doesn't personally, no.

Q. Which company you say Mr. Antonsen has no stock ownership in?

A. Western Containers.

Q. Does that corporation have business relations with the other one, in which he does?

A. Well, the setup is that the Western Containers manufacture and the Pacific Coast Containers are the sales outlet.

Q. Yes, it is the sales outlet for the manufacturer?

A. Yes.

Q. Now when did you first meet Mr. Antonsen?

A. I think it was about 1919 or 1920.

Q. When did you graduate from high school?

A. I didn't graduate.

Q. When did you enter high school?

A. 1920.

Q. And you went to high school, in which school in Seattle?

A. Broadway.

Q. Did you know where Mr. Antonsen's brother-in-law is now?

A. No; I imagine he is in Seattle. I don't know. I haven't [143] seen him for several years.

Q. You went with him on these occasions?

(Testimony of Ronald Capps.)

A. No, we went alone.

Q. You and Mr. Antonsen?

A. Yes.

Q. That is, on all the occasions when you went from the one garage to the other building described by you, you and Mr. Antonsen went alone?

A. Yes.

Q. And over what period of time did those visits cover?

A. Probably from first to last I imagine a year and a half, or two years.

Q. And how many visits did you make altogether?

A. Oh, offhand, about four or five; maybe a few more.

Q. Those were spread over a period of a year and a half, or two years?

A. Yes.

Q. When did you first see the baler?

A. On my first visit to the building.

Q. Did you see it there at all the subsequent visits?

A. Yes.

Q. You saw nothing operating at any time?

A. No, none of the machinery ever operating while I was there.

Q. Have you been employed by Mr. Antonsen continuously from that time to this, or by one of his companies?

A. No. There was a period in there that I worked elsewhere for a while.

Q. How long a time?

A. About two years, perhaps.

Q. The balance of the time you have been employed by him or his companies? [144]

A. Yes.

Q. Have you talked this over with Mr. Antonsen?

(Testimony of Ronald Capps.)

A. No.

Mr. FENLASON: That is all.

Redirect Examination.

Questions by Mr. PIERCE:

Did you talk to me about this?

A. This morning. I got a telegram from you last night to come down, and I drove last night.

Q. Mr. Antonsen was present when I talked to you, or not?

A. This morning, yes.

Witness excused.

Statement of Mr. Winter to the Court: And it is agreed that the issue that the Defendant has alleged in this case, to wit, that Rafter was the original inventor of the machine, of either the machine or the method claim that is embodied in our patent, was not tried out in that case.

CLARENCE LOWE,

called as a witness on behalf of Plaintiff.

Plaintiff's Exhibit 8 is regular commercial excelsior as produced by Antonsen's machine.

Plaintiff's Exhibit 7 is a bale of regular commercial excelsior as produced at the present time by Defendant's machine.

GEORGE F. McDOUGALL,

called as a witness for the Plaintiff.

Direct Examination.

Questions by Mr. WINTER:

Where do you live, Mr. McDougall?

(Testimony of George F. McDougall.)

A. Portland, Oregon.

Q. How long have you lived in Portland?

A. I took up my residence here in 1918.

Q. What is your occupation?

A. I am a professional mechanical and hydraulic engineer.

Q. How long have you practiced your profession? [145]

A. I entered the University of Michigan in 1894, and I left there four years later, and I practiced mechanical engineering during vacations the last two years, and for the next ten years I worked for various corporations and people in an engineering capacity—for nine years I think, and then I was appointed Superintendent of Public Works at Aberdeen, Washington, and I rebuilt the waterworks system there, and did a lot of paving work, and work of that character. Since that I have been working for myself as a consulting engineer.

Q. Are you licensed to practice your profession in the State of Oregon?

A. I am.

Q. How long have you been licensed to practice here?

A. They have what they call a grandfather clause here when that law was put in effect, and I waited until the day after the grandfather clause expired, and took my examination. I think my certificate is dated in 1921; I think I have it here in my pocket, or copy, rather, dated the 12th day of December, 1893—November 12, 1921.

Q. In your experience as mechanical engineer have you had occasion to do any designing?

A. I have designed every conceivable kind of machine. I have practiced machine designing and construction and invention. I have taken out thirty-two patents. About twenty-six years ago I became interested in patent matters and during the succeeding years I think I have read every Supreme Court case in the books,

(Testimony of George F. McDougall.)

and I have made an intensive study of patents and patent matters, and I try to keep myself up to date on that subject.

Q. Have you examined the Antonsen patent?

A. I have, very carefully.

Q. Have you ever had occasion to examine the so-called Antonsen machine? [146]

A. Oh a good many times, several different times.

Q. Where did you make that examination?

A. At Seattle, Washington.

Q. About when?

A. I think the first occasion was about two years ago, perhaps less; I haven't the date.

Q. Now you have seen the defendant's machine that you looked at yesterday?

A. I have.

Q. You saw it running yesterday. Did you ever see it before?

A. Yes, I saw it once sometime before, in company with yourself and defendant's counsel.

Q. Now did you see the machine operate yesterday?

A. Yes, sir.

Q. You may state whether the discs on that machine were in facial contact, or whether the edges touched?

A. Two of them appeared to be in facial contact; the third adjacent one, it was difficult to determine whether it was in facial contact or not. And then three or four others towards the left as you stood facing the machine, had increasing spaces between them, and from that time on until you reached the left hand end of the machine the spacing was fairly uniform, but the discs were apart. I can only be certain that two of them were in actual facial contact, although it might have been three.

Q. Now did you notice the machine operate?

(Testimony of George F. McDougall.)

A. I did.

Q. Was there any difference in the way the machine operated where the discs were in facial contact, and where they were not?

A. There was some difference, yes.

Q. Can you describe that difference?

A. There appeared to be more of a tendency for the paper to wind around the spindles at that point.

Q. At which point? [147]

A. At the point where the discs were in facial contact, and the paper emitted from that point was if anything a little straighter in the point where it was severed from the adjacent paper, than it was at the other. There was very little difference in that respect, however, because the discs themselves were very blunt and well dulled.

Q. Can you state why the paper would wind around the rolls or spindles where the discs came in contact?

A. That is a phenomenon that is rather difficult to explain; it might be caused by the crowding of the paper between the spacing, and probably was caused by that; but without a very careful analysis and check, opportunity for which was not afforded, it would be more or less a conjecture to say why it did that. Merely the fact that it was noticeably true, is all that I can say about it.

Q. Now did you examine carefully the distance between the discs, how far they were apart, discs on the upper roll and lower roll?

A. As far as I was able I noted that the discs were not bent; they apparently ran fairly true; and I noted also that the discs on the lower roll appeared to be considerably more even in spacing than those on the upper roll. I attempted to measure with a graduated steel tape just what the spacing was. I found

(Testimony of George F. McDougall.)

it difficult. It is a matter of thousandths or some fractions of an inch. They were spaced a little bit closer down near the point where these discs were in apposition, or appeared to be, than they were further out. (It appeared like there had been thinner washers placed between a few of them; I would say it is probably that that would account for the fact that these two, or possibly three discs, were riding, and from there on they were spaced more or less uniformly apart.)

Q. The washers were a little thinner where?

A. Immediately adjacent or to the left of those discs that were in contact.

Q. Did you notice the spring on the upper roll? [148]

A. Yes.

Q. And the discs that were in contact, where were they on the roll, with reference to the spring?

A. They were near the opposite end.

Q. And where was the spring?

A. Near the opposite end of the upper roll from the spring—that is, the spring was at the left hand, and the discs in contact were very close to the right hand end.

Q. If a person desired to change the discs on a machine of that kind so that there would be spaces between them, they would not be in facial contact, how would you go about it?

A. Well, you want to take a machine built like that, with the discs in facial contact, and change it so they would not?

Q. Yes.

A. It could be changed in several ways, yes sir. You could shove the shaft over and put a set collar on the shaft. That would be the simplest way to do it. Another way to do it would be to place a thinner washer between the end, as I think was done in this case, and that would allow these upper discs to the left

(Testimony of George F. McDougall.)

of that to set over that amount, or a thicker washer could be placed—or two, could be placed in the lower spindle; a very simple matter; would perhaps take fifteen or twenty minutes to put the set collar on; might take a couple of hours to change the spacing discs; it would not be necessary to take the discs off the spindle.

Q. Will you now look at the Antonsen patent, and calling your special attention to Claim 1: What are the elements of Claim 1?

A. Claim 1 reads like this: “In a paper shredding machine”—that of course is the locus—“the combination of a pair of parallel and oppositely rotated spindles” described as “each mounting a plurality of intermeshing beveled edged discs and means for bodily shifting the discs,”—that is another element—“of either group in the axial direction of their spindles for the purpose of adjusting [149] their spaced relation with the discs of the other group.” Now in that claim we find the combination of a pair of parallel and oppositely rotated spindles, as the first element, described as mounting a plurality of intermeshing bevel edged discs, considering that element as all one piece after assembly. “And means for bodily shifting the discs of either group in the axial direction of their spindles for the purpose of adjusting their spaced relation with the discs of the other group.” So there are two elements in the claim.

Q. How will that claim read upon the defendant's machine? Could you explain that better if you had before you this photo?

A. Yes.

Mr. WINTER: I will offer in evidence the photograph.

Marked PLAINTIFF'S EXHIBIT 12.

(Testimony of George F. McDougall.)

Q. Now do you know what that picture is? Is that an enlargement or something?

A. That picture is an enlargement of the drawing in the Antonsen patent, made from the particular printed copy of the patent that I have in my hand.

Q. Now referring again to Claim 1, will you point out the elements of that claim on that exhibit?

A. This claim calls for the combination of a pair of parallel and oppositely rotated spindles. Here is one spindle of the pair, here is the other spindle of the pair. They are shown in sections, at 11 and 12, and this means for providing rotation is shown in the spur gears 37 and 32, and pulley 3. "Each mounting a plurality of bevel edged discs fixedly mounted thereon." These are shown as the element 4, and shown in section here at 19, shown at their intermeshing of beveled edged discs. The bevel is difficult to see in the section, but it shows clearly in the unsectioned portion and on the top and on the bottom. Fixedly mounted is taken care of by nuts 21, shown at the opposite ends, near the opposite end of each spindle and showing threads on the spindles themselves by which the discs may [150] be compressed axially on the shaft of the spindle. "And means for bodily shifting the discs of either group in the axial direction of their spindles for the purpose of adjusting their spaced relation with the discs of the other group." That is found here in these same nuts here, having threads long enough so that within the limits of the threads the entire group of the upper spindle may, for example, be shoved from right to left, or from left to right, with the same adjustment on the lower spindle. That fulfills the condition so that the drawing reads on the claim, and the claim reads on the drawing. And the words, "Spaced relation," that word "spaced" is the thing

(Testimony of George F. McDougall.)

that affords novelty to the claim, and that of course is illustrated down here in Figure 3, and in the enlargement where the discs are shown with their edged sides adjacent but spaced from each other. I think that takes care of the entire claim.

Q. Now you have made an examination of the prior art to some extent?

A. I have.

Q. Do you know of any machines that had spindles mounted with discs and operated the same as this machine?

A. I don't know of any other machine that operated with the same mode of operation. I know of another machine that was comparable prior to this machine, that was intended for making paper excelsior, that had discs fixedly mounted on spindles, and it had every element of Claim 1, of the patent except that the discs were in apposition or cutting relationship, instead of being spaced apart. That patent was the Stackowski patent No. 1,319,498. I have a printed copy of it; and in which the inventor stated that this patent related to shredding machines, and particularly such as adapted to cut waste paper into narrow strips, capable of use as a substitute for excelsior. That patent was applied for December 18, 1917, and issued October 21, 1919. [151]

Q. What is the novelty in that claim?

A. The novelty in this Claim is the spaced relationship of the discs of one spindle with respect to the discs of the other spindle.

Q. Now will you tell us what the essential elements of Claim 2 are? How does Claim 2 differ from Claim 1?

A. Claim 2 differs from Claim 1 in a different statement of the spaced relationship. Claim 2 says "Bevel-edged discs fixedly mounted thereon, the discs of said spindles intermeshing with

(Testimony of George F. McDougall.)

their edge sides adjacent but not touching.” That is in fact practically the same statement in different language.

Q. Now you examined defendant’s machine, and I wish you would read Clami 1 on that machine as nearly as you can do it.

A. In the defendant’s machine, we find a combination of “a pair of parallel and oppositely rotated spindles”—that is found in defendant’s machine; “each mounting a plurality of intermeshing bevel edged discs”; that also is found in defendant’s machine. “Means for bodily shifting the discs of either group in the axial direction of their spindles for the purpose of adjusting their spaced relationship with the discs of the other group”. That means is found in the defendant’s machine in the fact with them two discs at least are riding and act as a support; that means also can be found in the changing thicknesses of the spacing washers between them.

Q. Spacing of what?

A. The thickness of the washer. It can be found also in any means whatsoever that could be applied to hold the shaft over so the discs intermesh but do not touch. In this particular case the means used were present in the unequal spacing of the greater majority of the discs.

Q. With reference to claim 2, did you find all of the elements of Claim 2 in the defendant’s machine?

A. In the defendant’s machine we find the combination of the pair [152] of oppositely rotating and parallel spindles; that element was present. “Each having a plurality of bevel edged discs fixedly mounted thereon”. That was also present. “The discs of said spindles intermeshing with their edges adjacent but not touching.” That was the case with everything except certainly two, possibly three discs, but a great majority of them were intermeshing with their edged sides adjacent but not

(Testimony of George F. McDougall.)

touching. "Means synchronized with the spindles for conveying and feeding the stock between said intermeshing discs." That was a superfluity but that was present also in the defendant's machine.

Q. The Antonsen machine that you saw in Seattle, was that constructed according to the patent?

A. Yes, sir.

Q. The specifications of this patent?

A. It was.

Q. Does the defendant's machine operate in the same way that Antonsen's machine operates, or that a machine would operate that is constructed according to the specifications embodied in the Antonsen patent?

A. It is the same mode of operation, and in general produces the same result. I don't think it operates quite as good as the Antonsen machine; that is, however, a quality of the machine itself and not the mode of operation, a matter of adjustment and size of discs, etc.

Q. Now will you read Claim 7.

A. Claim 7 reads: "The method of manufacturing paper excelsior and the like, which consists of tearing sheets of paper stock into narrow strips and separating said strips and piling them in haphazard fashion."

Q. How many elements are there in Claim 7?

A. In claim 7, being a method claim, we speak of steps and not elements. "The method of manufacturing paper excelsior and the [153] like, which consists of tearing"—that is the first step—"sheets of paper stock into narrow strips." The next step is "separating said strips" and the third step is "piling them in haphazard fashion".

(Testimony of George F. McDougall.)

Q. Have you examined the excelsior contained in Plaintiff's Exhibit 7?

A. I have.

Q. Did the process of making that excelsior contain those steps?

A. First, the description torn, and that is the only novelty there is in Claim 7, the tearing; now separating, stated there, and piling them in haphazard fashion may be an incident in the machine, or it may occur later, it does not make any difference when and where it occurs, but the statement and precedent to Claim 7 is found over here, commencing at Line 25, Page 1, of the patent: "The object of my invention is to provide improved means for the shredding of paper whereby the same is torn instead of cut into narrow strips or shreds producing thereby irregular featherly edges." Now that was the object of the invention, and the statement in those six lines agree with the dictionary in that they state that shredding may consist of either cutting or tearing, and in which the patentee selects the tearing method and rejects the other; in fact previous to that he has stated that it is old to cut; commencing at Line 5, he says, "It has been customary heretofore to cut the paper into narrow strips or shred by means of a machine consisting essentially of a pair of oppositely rotated parallel shafts, etc." Now commencing at Line 40—or commencing at Line 35: "A final object is to provide an improved method of manufacturing paper excelsior, whereby the production capacity of the shredding machine is greatly increased over previous methods. It is the antecedent in that specification that justifies Claim 7, that too shows description of means by which the method can be carried out.

(Testimony of George F. McDougall.)

Cross Examination. [154]

Questions by Mr. FENLASON:

So the other claims which you did not direct attention to, namely, Claims 3, 4, 5 and 6, they do not even purportedly read on the machine here in question, for the reason that they all combine the further element of a comb. Am I right?

A. I haven't considered the other claims, as I understood the opening statement of counsel for plaintiff that he was going to read on those claims. He made that selection of claims, I didn't have anything to do with it.

(Question read).

A. I think that is correct. I think they all added an element, that comb that is shown for stripper.

Q. Now Mr. McDougall, I have a newspaper here which I tear into shreds and have it float down. Does that process read upon—I mean does Claim 7 read upon that process?

A. No, it does not.

Q. Why not?

A. Because this is a mechanical method, and in reading Claim 7 you must go back to the specifications to see what it is he is driving at.

Q. Is there anything said there about mechanical method?

A. No, the method—of course that doesn't read on the claim itself, and I don't think would be sued for infringement for tearing them up with the fingers.

Q. What is that?

A. That does not read on Claim 7, because that is ridiculous. In the first place you cannot tear paper excelsior into narrow strips with your fingers.

(Testimony of George F. McDougall.)

Q. You can't do that?

A. You can't duplicate the paper excelsior that you have out here in those bales, with your fingers, except by long—I don't think you can do it at all.

Q. Were there any limitations as to the size of the strips?

A. What? [155]

Q. Were there any limitations as to the size of the strips?

A. It says narrow strips?

Q. What do you mean by narrow? A half inch might be narrow, might it not?

A. What?

Q. A half inch might be narrow, might it not?

A. Oh, you have got to use your judgment about defining a word like that. Narrow would mean, could easily mean, some distance less than the length, if you want to carry it out that way, but you must always take into consideration that it says manufacturing paper excelsior. Now paper excelsior would hardly be a suitable article if the strips were half an inch wide. It says, "Method of manufacturing paper excelsior and the like". That would seem to put some limits on the width of the strips.

Q. Does it require this method patent here; does it require that it be manufactured by machinery?

A. Oh that is supposed to be the case.

Q. Does the claim provide for that?

A. He has already described the mechanical method, and of course he has arranged the mechanical equivalents commonly allowed to a patentee on that sort of thing; and it is always understood what he is patenting is the mechanical equivalent of what he has described.

(Testimony of George F. McDougall.)

Q. Isn't each claim a separate and distinct patent in itself?

A. I beg pardon?

Q. Isn't each claim a separate and distinct patent in itself?

A. Yes, in a way it is, particularly the method claim as distinguished from the machine claims.

Q. Supposing now that the Hedrick machine here was in facial contact, complete facial contact, and we will suppose further that, being in facial contact, it cut strips of paper. Would it infringe that claim? [156]

A. If the discs were in facial contact and sharp so they would cut; they would not cut in their present condition, but if they cut the paper they would not infringe that claim, because this Claim says, "which consists of tearing."

Q. Now suppose this: Suppose that they were in facial contact and the knives were dull so that they tore the paper. Then would would it infringe that Claim?

A. You are supposing something that can't happen. If these knives are held in facial contact and are dull, the machine will probably block when you undertake to feed the paper through it.

Q. That is your opinion?

A. That is easily demonstrable; that is a mechanical fact. We don't have opinions about the multiplication table, and things like that.

Q. Will you demonstrate that to me? You say it is a demonstrable fact. I would like to see it demonstrated.

A. With the apparatus here in court?

Q. Have you any apparatus which you can rig up and demonstrate it to me?

A. You have your own apparatus down there; you can try it yourself; no question about that.

(Testimony of George F. McDougall.)

Q. You said that was a demonstrable fact?

A. It is.

Q. Can you demonstrate it to me, sir?

A. If you give me your apparatus, and put these discs in facial contact; I will demonstrate it to you, certainly.

Q. How?

A. Well, do you wish to do that?

Q. If we get through, or continue over until Monday, will you undertake to do that over the week end for me?

A. If somebody wants to pay for my time, I will be glad to.

Q. Will you do it voluntarily if we furnish you the equipment, [157] and demonstrate it to me?

A. I don't want to go down there and see the machine all over, and do that sort of thing for anyone; but I am telling you, as a mechanical engineer that has had thirty-seven years of experience, that the machine will not cut with those knives in facial contact——

Q. Or tear the paper with those knives in facial contact?

A. No, because the machine will block.

Q. The machine will not operate at all?

A. The machine will not operate at all.

Q. You mean it will not even turn over. You say that if the knives or discs on the Hedrick machine were now in facial contact, the machine would not operate?

A. I do.

Q. Would the discs—would the spindles revolve?

A. Without any paper in them they probably would, they certainly would.

Q. And if you put paper in would there be any separation occasioned by means of the spring action upon that floating upper spindle?

(Testimony of George F. McDougall.)

A. You mean that separation under compression of the spring?

Q. Yes.

A. That could possibly take place long enough to let the paper get between the faces of the discs.

Q. But you don't think it would take place long enough while the paper was running through the machine?

A. No, sir.

Q. So if paper was cut on the Hedrick machine, it would not read upon your Claim 7 here, is that correct?

A. If the paper was cut on the Hedrick machine it would not read on Claim 7 because Claim 7 says, "consists of tearing," and tearing and cutting are two different methods of shredding, as is stated in the dictionary, and also particularly stated in Antonsen's specifications. [158]

Q. Now let us get back to Claim 1. I think you broke Claim 1 down into two elements?

A. I did.

Q. Now in the Hedrick machine—is that a paper shredding machine?

A. Yes, it is a paper shredding machine.

Q. And has it the combination of a pair of parallel and oppositely rotating spindles?

A. It has.

Q. Each mounting a plurality of intermeshing bevel edged discs?

A. Those are there.

Q. Now does it have means for bodily shifting the discs of either group in the axial direction of their spindles?

A. It does.

(Testimony of George F. McDougall.)

Q. And where is the means in this Hedrick machine for bodily shifting in the axial direction of the lower spindle?

A. It has a nut on one end and a shoulder on the other; by loosening the nut the discs may be shifted towards the loosened nut, and a spacer put behind them, and then the nut tightened; that would shift them to the left. They could be shifted back again on reversing the operation:

Q. Does it have means for shifting there their spaced relation, the upper one?

A. It does.

Q. Now then if that condition prevailed at the time this machine was built, couldn't a claim have been written for that machine identical with this one here?

A. I have very carefully read the Rafter——

Q. You answer my question, please.

A. That condition did not exist, because there was no provision made for space relationship.

Q. Well is there any provision made now for spaced relationship?

A. There is. Since it has been discovered that spaced relationship [159] was desirable, it was a simple matter.

Q. Are you saying that a change has been made in that machine?

A. I am saying that it does not conform to Mr. Rafter's testimony as to how the machine was built. I heard him give that testimony.

Q. You heard him give the testimony, did you, that the discs were not touching?

A. I heard him state that, and I also heard him state that it was his standard machine, that the drawings of his patent were made from his standard machine. In that respect his testimony was inconsistent.

(Testimony of George F. McDougall.)

Q. Now then Mr. McDougall, I will ask you were there means in the Hedrick machine so that the pull of the spring could be stopped if desired before——

A. I beg pardon?

Q. Is there means upon the Hedrick machine so that the pull of the spring could be stopped prior to the time that the shredding discs were brought into facial contact?

A. Why—prior to the time that the discs are brought into facial contact?

Q. Yes.

A. There is not; some of the discs must be in facial contact to withstand the compression.

Q. Isn't there a collar?

A. No collar on it now that keeps them from coming into facial contact, because there are just two of them carrying the load there. I am sure and certain of that.

Q. If you have an adjustment upon the spring with respect to its tension, can the adjustment be so made that the pull of the spring will be completely used prior to the point of bringing the discs in facial contact?

A. No, that is not a practical proposition; it could not be done the way Mr. Rafter described it.

Q. Could not be done?

A. No, sir. [160]

Q. Now then, assuming that you had what we call the Foster machine here, in facial contact, and the tension on the spring is weak, we will say, and you run paper through the machine, what effect if any would be imparted as respects longitudinal movement of the upper spindle?

A. If the spindle moved over it would operate the same as a pair of shears, and would cease to cut; would neither cut nor tear. If I had a pair of shears here I could explain what I mean.

(Testimony of George F. McDougall.)

Q. Let me ask you this: If moved over—say we shift it over one sixteenth of an inch, you say it would neither cut or tear?

A. It would neither cut nor tear.

Q. Why is it if they were fixedly spaced one sixteenth of an inch it would tear?

A. The reason for that is, that as the sheet goes in it has a certain width; it is grasped at each edge, and intermediate of the edges all the way along then it is merely corrugated by the action of these discs; the length overall of that angular distance between and around the discs being greater than the width of the paper, it necessarily tears it.

Q. That would be true if you had a spreading effect of the upper spindle. That is exactly what force would come into play.

A. That is not true in that case, because in that case you have a distinct wedging action of the paper between the faces of the discs, just as you have if you undertake to cut thick paper with a dull pair of shears, and the paper turns sidewise. That is precisely what you have; and you must remember too, counsel, that with nearly a hundred discs in there that would be a very serious load on the machine, and that ordinary belt or ordinary motor would not pull the machine. That is the reason the machine space has been described.

Q. If this metal ran in facial contact would it heat?

A. No.

Q. Wouldn't heat? [161]

A. No, I have heard that—I really had to smile about it; that is a common commercial plan, what we call friction gearing; hoists are made that way, with grooved discs running together in frictional contact. You can buy them right here in Portland, and I have known of them for more than forty years.

(Testimony of George F. McDougall.)

Q. What do you mean by grooved discs?

A. Smooth discs running—grooved discs running in frictional contact together.

Q. For the purpose of——

A. Transmitting power.

Q. You say those don't get hot?

A. No, they don't get hot.

Q. They are mostly made out of what is known as friction paper?

A. No, sir, made of cast iron and steel and other material of that description.

Q. How fast do they rotate, have you any knowledge?

A. I have seen them up to—I built a machine myself once that had seven hundred fifty revolutions per minute; a four inch disc; that would give a peripheral speed of pretty close to two thousand feet a minute.

Q. Do you know the peripheral speed of this machine?

A. No, I don't know anything about it.

Q. Would there be any wear upon the edges here?

A. You mean the points in contact?

Q. The points that came in contact?

A. Very slight.

Q. Very slight wear?

A. Very slight wear. It wears of course in proportion to the load; but if those discs, eighty-five or ninety of them, or any other considerable number, in the length of that spindle—in making those things it is almost a physical impossibility, unless some instrument maker, to make them originally so that these discs [162] are in equal contact?

Q. That is true?

(Testimony of George F. McDougall.)

A. That is true. But they will wear in, they don't wear out; just like any bearing, it fits itself; it can fit it much better than any human being can fit it with any tool he is capable of wielding, just as a bearing wears in—these discs as originally set up—in fact I knew one here in Portland for the Johns Furniture Company. The mechanic who made it is one of the best mechanics I ever saw. He had difficulty to make it there, it would shear at times, but after a short time running, and he put a little lapping compound on it to help it, they worked together and was a perfect machine, is today.

Q. Mr. McDougall, it is your opinion, when the original machine was set up, will be several of these discs which were not in facial contact?

A. The distance out of facial contact was not particularly discernible to the eye—I would rather express it, would be a difference in the amount of load on the several discs.

Q. Running through multiple thicknesses of paper, did I understand you to say it would be impossible to run those through the machine; that the effect was to spread?

A. I will have to have that question again.

COURT: Will you restate that?

Q. Now you take the Foster machine, for example, the one that was testified here was in facial contact. Now is it your opinion that if sufficient paper were fed to that machine to cause an opening between the touching discs, that the machine would refuse to operate in that position?

A. Oh certainly, that is exactly what would happen.

Q. That is a fundamental feature of that design.

(Recess)

(Testimony of George F. McDougall.)

Q. Now Mr. McDougall, if the shredding discs were touching or in facial contact would it read upon Claim 1 of these Letters [163] Patent?

A. No.

Q. You would still have a paper shredding machine?

A. You would.

Q. And the combination of pair of parallel and oppositely rotating spindles?

A. You would have those, both of which are in the Stackowski patent.

Q. Each mounting a plurality of intermeshing bevel edged discs?

A. That would be there.

Q. And you would have means of bodily shifting the discs of either group, wouldn't you?

A. You might or might not.

Q. You testified here——

A. Yes you do. I will admit all that is there.

Q. And that would be for the purpose of adjusting their spaced relationship, would it?

A. No it wouldn't adjust their spaced relation, that would be for the purpose of bringing them into contact.

Q. It could be used for the purpose of adjusting this spaced relation too, couldn't it?

A. If you used for the other purpose, then they would no longer be in contact.

Q. I understand that; but I am asking you, you had means for adjusting the spaced relationship?

A. The means as shown in the other device, is not for adjusting space relationship, but for adjusting—the means for adjusting their spaced relationship was not present in the machine

(Testimony of George F. McDougall.)

described as the Foster machine, because those don't have spaced relation.

Q. Yes, but were means there to adjust the spaced relationship?

A. There was no such means provided; that purpose was not contemplated.

Q. Well what means have you got now that you didn't have, you [164] wouldn't have, we will say, in the machine if the discs were touching?

A. You are talking about the Foster machine?

Q. Yes, we will take the Foster machine.

A. You remember counsel, I have never seen the Foster machine, and all I know about the Foster machine is that Mr. Rafter said it was made according to Mr. Rafter's drawings.

Q. That is your recollection of what he said?

A. Yes, I think the deposition will bear me out.

Q. Let us come to the Hedrick machine. Now you say it has a means for shifting bodily the discs of either group in an axial direction of their spindles for the purpose of adjusting their spaced relationship with the discs of the other group.

A. Yes, that is true.

Q. What are the means in his machine now that make that provision?

A. The means that are actually used cannot be identified with certainty, but I think that the means used in that machine is a variation of the thickness of the spacing washers.

Q. Now didn't you state, when I asked you about the shifting of the lower roll, that it had a nut there that could be used for that purpose?

A. Oh, it has a nut there, yes, sir.

(Testimony of George F. McDougall.)

Q. You don't claim that that nut has been added, do you?

A. No, that nut was not intended for that purpose.

Q. But could it have been used for that purpose, sir?

A. If the manufacturer knew that that purpose was desirable, it could have been used for that purpose.

Q. And then would it have read upon this Claim?

A. If used for that purpose, it would read on that claim, certainly.

Q. So that you had everything present in the machine by screwing a nut to give a spaced relationship?

A. You had everything present except the knowledge of how to do it, which is taught in the Antonsen patent, and the utility derived therefrom.

Q. You don't know of your own knowledge whether or not Rafter [165] employed the use of that nut to make some—to create some space between the shredding discs, do you, of your own knowledge?

A. I have read Mr. Rafter's specifications very carefully, and he says not. I have no other knowledge on the subject.

Q. Isn't it often the case that the specifications and claims do not accurately portray the invention?

A. Oh I have seen such cases, I am quite sure.

Q. Didn't you tell me in conversation that happened you would say at least twenty-five to thirty per cent of the time, pointed out a patent that my father had, for example?

A. Yes, I told you that. The chief difficulty is however that they mix up too many unessential elements in the claim; it isn't that they don't contain the invented element, because if they didn't contain that the claim never got by the examiner, but they mix too many other elements up with it, and make the claim

(Testimony of George F. McDougall.)

aggregate, then the claim is valueless even though stating the inventive element.

Q. If we could assume now as a fact that in the operation of the Rafter machine, while not shredding a load of paper, had the discs in facial contact, and further assume that when three or more pages of paper were running through the machine, that the machine—the upper spindle was shifted longitudinally so as to create a spaced relation between the shredding discs, I ask you if Claim 1 would read upon such a machine?

A. You mean “with means of adjusting the space relation.” That doesn’t read on Claim 1, because that isn’t meant for adjusting the spaced relation; it is meant for maintaining the discs in contact; that is, it can by no stretch of the language be considered as means for maintaining or adjusting the spaced relation. It is put on there and intended for means of maintaining the discs in contact, so it does not read on Claim 1, if it maintains the discs in contact. Now the spring we have with the Hedrick machine, the defendant’s machine, at present does not maintain the discs in contact except for two or possibly three at the right end of the machine as you face it; the [166] discs from there on, the right side of the machine, are spaced between and the load on that machine is carried on the edge of the face of the discs in contact, and a much better way would be to put a set collar on the end of the shaft and hold it over there, or on both ends; the spring does not do anything except act as a set collar on one end, and the discs act as a set collar on the other,—a very crudely arranged affair; and if you wanted to maintain that spaced relation the best way is to put a set collar on both ends of the shaft, and hold them there. As it is now the spring, as near as visually able to determine, does not move under the influence of any power going through; I checked as close as I

(Testimony of George F. McDougall.)

could, but the frame itself springs and it is difficult to tell whether there is any movement. I couldn't discern any, and I am a pretty close observer of that sort of thing. I heard a sound that has been described here in the court room before; there is a little sound as the paper enters the machine, and another one as it leaves, much as throwing a wheel in a threshing machine, but was no metallic click that I was able to discover, and I tuned my instrument up to its full power, and listened for it.

Q. Are you a licensed patent attorney?

A. Yes, I have been registered, or admitted to the practice before the Patent Office for about twenty-three years.

Q. You have examined this Hedrick machine quite carefully, have you?

A. Just as carefully as possible under the circumstances.

Q. I believe you made a prior examination?

A. I was out there with yourself and counsel for plaintiff.

Q. Yes, I permitted a prior examination. Now because of the fact—referring to the Hedrick machine out there—that the spindle is filled with discs, one of metal, another of fiber, and because of the large number of discs on the spindle, would you say as a practical proposition that it would be practical to maintain the discs upon the respective spindles each in facial contact with the [167] companion disc disposed upon the other spindle?

A. It is difficult to tell whether that machine was made accurately in the first place, or not. The discs are not in condition to be kept in edged contact at the present time. They are dented and bent, evidently from foreign material going through them; the frame is rather light for construction of that kind; but they could be put in actual facial contact possibly, by putting new spacers in, or regrinding the faces of the discs; it would require a general remodeling and rebuilding the machine to do it at

(Testimony of George F. McDougall.)

present; you undoubtedly would have to have spacers, and your discs might be required to be refitted or put under a surface grinder.

Q. Is there any means provided upon each of these spindles for regulating the relative overall length and relative spacings of one of the discs relative to the other, upon each of the spindles?

A. That question is rather involved.

Q. I say, is there means provided upon each of these spindles for regulating the relative overall length and the relative spacing of one of the discs relative to the other upon each of the spindles?

A. Overall length of the discs relative to another disc. I don't understand that. Do you mean of the separate shafts? Now we have that disc; we have the thickness of the disc, and we have the thickness of the spacing, and if the number of discs—if the discs are all the same thickness and the number of discs the same on each shaft, the spacing washers are all the same thickness, obviously it is merely a matter of assembling the same number of discs on each shaft, and then placing them so they are in contact. That has been stated here today as a matter of accuracy of manufacture.

Q. Do you know what the separator discs on the Hedrick machine are made of?

A. I do not.

Q. Did you examine to try to find out that fact?

A. I tried to ascertain the fact, but I was unable to positively [168] do so.

Q. Do you know what material those discs are made of?

A. No one could tell that without making an analysis of that they have the appearance of being steel.

Q. Did you test these discs with a file to ascertain their degree of temper or hardness?

A. I did, yes.

(Testimony of George F. McDougall.)

Q. Did you conduct any test to ascertain whether the discs themselves were uniform in thickness?

A. It is not possible with them assembled on the shaft within the degree of accuracy of measurement required of a machine of that kind. It would have to be measured by micrometer, and it cannot be measured by micrometer in place.

Q. I want to ask you a hypothetical question. Assuming that we have for example a Foster machine, and assuming that we have a sufficient run of paper under the discs to cause a spreading so as to make an aperture between the discs; and assume further that the machine does continue to operate, and that paper does continue to pass through, what kind of paper excelsior will be produced?

A. Can I put another assumption in there?

Q. No, you answer the question.

A. You have asked something about a machine I have never seen. Will also have to assume that the Foster machine is practically represented by the Rafter drawing. I have never seen the Foster machine.

Q. No, I am not assuming that at all. I am making an assumption.

A. You have one factor of the equation that I can't supply, and I can't answer the question, because I have never seen a Foster machine.

Q. You can't answer the question?

A. No, I haven't seen the Foster machine.

Q. Let me ask you this hypothetical question: In a paper shredding machine, suppose we have a combination of a pair of oppositely rotating parallel spindles, each having a plurality of bevel edged discs fixedly mounted thereon, and that the lower spindle is fixedly [169] mounted in an arbor, and that the upper

(Testimony of George F. McDougall.)

spindle is mounted in an arbor so you have a longitudinal movement, and by virtue of a spring means the edges of the upper discs, the edges of the discs on the upper spindle are getting surface contact with the discs on the lower spindle when the machine is running without load; and further assume when this machine is operated with sufficient thickness of paper so as to exert such a pull upon the spring as to force the upper roll in a longitudinal direction so as to take the shredding discs out of contact; and further assume that when such is done the machine will continue to operate and pass the paper through it, I will ask you what kind of paper excelsior you would then have?

A. You have an impossible assumption in there.

Q. You say it is impossible?

A. You have an impossible assumption in there, yes.

Q. In other words, the impossibility you claim exists in the longitudinal movement of the upper spindle?

A. Enough to get paper in between the faces of the discs, then the machine will not pass paper through it.

Q. Assume that the movement is such as to make a displacement say one thirty-secondth of an inch, would I then have an impossible condition?

A. If you have a displacement of one thirty-secondth of an inch, that calls for possibly eight or ten sheets of paper, doesn't it? A paper is about .0035 of an inch, newspaper, and that calls for eight or ten sheets of paper in there, and with that amount of paper in there you will have a braking effect, or retarding effect on your machine, multiplied by the number of discs that are in contact with the paper under similar conditions, and you will have a blocking effect on your machine which will prevent the paper from going through.

(Testimony of George F. McDougall.)

Q. Suppose you developed that condition with four sheets of paper then, as an assumption. What would be the effect then on the [170] machine, would it block?

A. You can reduce that number of sheets to the minimum if you wish, and if the spring is still light enough so the discs will spring apart, you will have the same condition that you have with a pair of shears when the paper turns sidewise between the blades; nothing happens, it doesn't either tear or cut.

Q. That is true, is it?

A. Just a breaking of the paper due to the adjacent discs, but you would not cut it into strips or shreds.

Q. Would the paper come out mangled?

A. You could break the ends of the paper as it went in, up to the time it ceased feeding altogether.

Q. Then Mr. McDougall, would it be possible in your opinion to produce excelsior having rough or feathery edge, or scalloped edge, with the Rafter machine?

A. That would be very easy. It is done right here at the Hedrick plant; considering they make these changes in it that we find at present in the Hedrick machine.

Q. Would it be possible to make any paper excelsior with the Rafter machine having feathery, rough, or scalloped edges, using the machine as it is constructed by Mr. Rafter—as these machines were constructed by him?

A. Will you allow me to get my information as to how that Rafter machine was constructed, by his testimony and by his specifications. If you will remember, I have never seen the Rafter machine.

Q. Oh, you have never seen it?

A. As such.

Q. If it is developed here from the testimony that the particular machine that Mr. Hedrick has, at the time it was built

(Testimony of George F. McDougall.)

by Mr. Rafter had a displacement between the discs to the amount of one sixty-fourth of an inch, I will ask you whether or not that machine would be a cutting machine or a tearing machine? [171]

A. With that spring on there just as Mr. Rafter described it?

Q. The machine that you have seen; supposing now that the discs when they were—when the machine was first built by Mr. Rafter, had a separation of one sixty-fourth of an inch; would it be a cutting machine or a shredding machine?

A. It wouldn't be much of anything with one sixty-fourth.

Q. You don't think it would work?

A. No. It might work a little, a few sheets of paper while the knives were very sharp. That condition would not last very long, and with that separation in there it would not amount to a great deal, and it couldn't be made that way with a separation of one sixty-fourth of an inch, and that spring in there, the way Mr. Rafter himself described it; couldn't be held that way nor any degree of separation unless the discs were unequally spaced as they are at present, so that some discs or some member of some kind were carrying the load of that spring. You can't put that spring in there and then have the discs stay apart, because you have to have something to hold them.

Q. You don't know whether or not Mr. Rafter spaced these discs unevenly or not, do you?

A. He told us he didn't, up there in Seattle; that is all I know about it.

Q. You never examined the machine?

A. No.

(Testimony of George F. McDougall.)

Redirect Examination.

Questions by Mr. WINTER:

I have a question I should have asked on examination in chief. Mr. McDougall, have you ever seen a machine that would make torn paper excelsior a different kind from the Antonsen machine or the Hedrick machine?

A. Yes.

Q. Where did you see that kind of machine? [172]

A. I built an unravelling machine for the purpose of unravelling woolen cloth, and it bears no physical resemblance to this machine, and the teeth on it were a little rough, and I undertook to feed paper through it to see if I could take the wire edges off them so it would not cut the thread, and it made a pretty good grade of paper excelsior. That was before I knew anything about paper excelsior.

Q. Was the machine you were speaking about, that unravelling machine you made—did that in any way function the same as this machine?

A. No, it does not. In the first place it only has one rotating member; it has a comb plate as a substitute for the lower rotating member.

Q. So that machine is not in any sense an equivalent of the Antonsen machine?

A. No, in no sense a mechanical equivalent of the Antonsen machine.

Witness excused.

KENNETH W. HOLMAN,

called as a witness for the Defendant.

I live in Portland, Oregon, am manager of Edward Holman & Son. I am a mortician, have been for eight or ten years. The company used paper excelsior in its business. Our records don't show the exact date we began using it, but we moved to our new location in 1924, and we started to use it shortly after that. I would say maybe 1925. We purchased it from the Paper Excelsior Company. I know Mr. Wheeler connected with that company. That was the first paper excelsior I had used. It was the first excelsior that came to my attention. I examined it, it had rough edges and had the appearance of being torn. I remember discussing it with our employees. I personally handled the excelsior. Defendant's Exhibit J for identification marked. Defendant's Exhibit J is a fair sample of the excelsior purchased by me at the time I just mentioned.

Cross Examination.

I first saw the excelsior, Defendant's Exhibit J for identification, just now and am comparing it with what I saw in 1925. [173] I don't know what part of 1925 it was, whether it was August or winter or spring. I started to work for Holman part time about 1923 or 1924. I don't remember the year I started to work, whether it was 1923 or 1924. I was 15 years old in 1924. I think I was going to Jefferson High, or Washington High at that time. I went to two high schools, I am not sure which one in 1924, probably Jefferson High. I am not positive about that. I can figure it out if you want me to take the time (counsel advised not to take the time). I was in High School until about 1926. I lived at Holman's and when I wasn't in school, I was in the

(Testimony of Kenneth W. Holman.)

business. I did everything a man learning mortuary business would be doing.

By stipulation, Defendant's K, M & N, being photographs of Antonsen's place of business and the Rafter machine operated by Antonsen, which pictures were taken on or about March, 1925, reprints of which appeared in the Seattle Times article, Defendant's Exhibit H, were all admitted in evidence. Exhibit K shows the machine being fed. Exhibit M shows a bale of excelsior. Exhibit N shows the excelsior as it drops from the machine into the heap.

VERNON FAXON,

called as a witness for the Defendant.

Direct Examination

Questions by Mr. FENLASON:

Where do you live, Mr. Faxon?

A. Portland, Oregon.

Q. How long have you lived here?

A. Since 1909.

Q. What is your business or profession?

A. Official Court Reporter for Multnomah County, Multnomah Court, and also examiner of questioned documents.

Q. Have you specialized in the examination of questioned documents?

A. I have.

Q. And what field does that cover generally?

A. Documents of all nature, and writings that any question about is [174] raised in any way; wills, forgeries, and typewriting.

(Testimony of Vernon Faxon.)

Q. How long have you been engaged in that class of work?

A. Well, from the questioned documents or handwriting ever since about 1914, I have been making a study of that. That is when I first became interested in that field; photography dates back to when I began as an amateur photographer in 1908.

Q. I will hand you defendant's exhibits M and N; calling your attention to them, I will ask you if you have heretofore seen these exhibits?

A. I have.

Q. And have you heretofore made an examination of these exhibits?

A. Very fully, yes, sir.

Q. What did you use to make the examination with?

A. Steroscopic microscope.

Q. What is a stereoscopic microscope, just briefly?

A. Well, a stereoscopic microscope is a microscope that magnifies to whatever magnification you desire by the insertion of the proper lens, and it also gives the third dimension of depth; I think in examining flat fields, such as that photograph it wouldn't be much different from an ordinary microscope there.

Q. Did you make an examination to determine the physical condition of the edges of the excelsior shown in these exhibits, with regard to being rough or smooth?

A. The question put to me was to examine these strips of paper excelsior to see if it were possible to determine if the edges were smooth machine cut or if they had a ruffled or torn appearance. That I did.

Q. What did you find?

A. I found some of them with torn or rough appearance, and

(Testimony of Vernon Faxon.)

some of them appeared to be smooth or machine cut, although you can't state that change so definitely as you can the other.

Q. Are those photographs taken in such a way as to clearly bring out [175] any ruggedness which might have been present on the strips of excelsior?

Mr. WINTER: Object to that; the witness has not shown himself qualified to answer the question.

The COURT: Yes, I think you might improve the qualifications.

Q. You said something about you were interested in pictures from what time?

A. Since 1908.

Q. What has been the extent of your interest?

A. Well, I did all the work of an amateur photographer, taking all kinds of photographs, and also making my own enlargements. Right now, in the field of questioned documents, I maintain a complete laboratory for taking my own photographs. I am equipped to take contact prints of photographs up to as high as eleven by fourteen; I also have numerous lenses for different kinds of photographs and also filters, or screens for developing or blotting out certain colors, in fact any work we may be called upon.

Q. Is that part of your work in your profession?

A. It is a very essential part.

Q. I will ask you whether or not these photographs were taken in such a manner as to most clearly bring out any raggedness or jaggedness which might appear on the edges of the strips of excelsior?

A. No, they are not.

Q. What is that instrument you said you used?

A. Microscope.

(Testimony of Vernon Faxon.)

Q. Have you that instrument with you?

A. I have.

Q. Will you kindly adjust the microscope on certain portions of that picture so as to reveal the rough or jagged edges of the excelsior; show it to the judge, please.

A. I will first state that a great deal of that is not what we call in focus, and only certain portions of it can we see clearly; [176] there is the first one if you will just look down there, that crosses that black spot there.

Q. Now Mr. Faxon, will you just shift it over to the next stringer, that is down there.

A. That does not show anything there; that is not exactly in focus; there is another one there.

Q. Now, Mr. Faxon, I thought the other day I saw one down here, I believed that showed, if I place it correctly.

A. Yes, that is the best one of the bunch.

Mr. WINTER: As far as torn is concerned?

A. Yes, as far as torn is concerned; that is as far as I am trying to demonstrate.

Q. Now these samples came from Exhibit M.

A. If you want higher magnification I have it, but that is as high as you can do with this.

Q. Mr. Faxon, could you illustrate that on the other exhibit we have there?

COURT: Referring now to which exhibit?

A. This is Exhibit N. The other was M. That center one, running up, is slightly out of focus, it is slightly blurred, but you can still see it has a ragged edge there, the one right in the center, with dark on each side; that one by itself, too, on the left hand edge. Do you want still more of these?

(Testimony of Vernon Faxon.)

Q. I think that is enough.

COURT: I think perhaps while the witness is on the stand he had better take a pen and mark on the exhibits the particular portion to which the attention of the Court has been called.

A. (Marking) I think those three are the only ones shown there.

COURT: The portion upon Exhibit M, included between the pen marks in three different places.

A. "N", right in there, is a bunch of those.

COURT: The portion on Exhibit N, to which he points, are the [177] particular strips of paper that the defendant placed under the microscope.

A. I will say if we had the film enlargement it would show probably a little better, different ones.

Q. Mr. Faxon, if the paper excelsior had a smooth—had an edge cut by a pair of shears would it exhibit the ruggedness that you have found and testified to here?

A. I am not attempting to qualify as an expert on cut edges. If you want my private opinion, I would say I would not expect it to have a rough edge that way.

Q. You said something about a portion of the photograph being out of focus; what do you mean by that?

A. Well the lens—in taking a photograph there is a certain point that will be in focus, and all other points further away or closer to the camera will be what we call slightly out of focus; it is not adjusted for that, and it won't be sharp in detail unless it is photographed at what they call uniformity. That is, focused so everything is in focus, but it is much smaller in size, like taking a scene out of doors.

Q. Are various portions of the excelsior there out of focus?

(Testimony of Vernon Faxon.)

A. You will notice if you look at it with a magnifying glass, that they are slightly blurred; that is because they are not exactly in focus; the enlargement will show all that, or the microscope, either one.

Q. Where it is not in focus what effect, if any, would it have upon the detail of the edge?

A. Well it would make it kind of blurred; it would not be sharp and defined; we couldn't tell whether it was either a ragged edge or a straight edge, because if it were a ragged edge the little points would not show in detail, but kind of blend together and give a blurred effect.

Cross Examination.

Questions by Mr. WINTER: [178]

What is the power of your lens?

A. These were low power there; I think it is—I would call that about a ten diameter, fifteen.

Q. Ten diameter, or fifteen diameter; how many times does that enlarge the object looked at?

A. That goes every direction; ten diameter would make about a hundred times.

Q. Would make it a hundred times bigger than it would be with the naked eye?

A. Yes.

Q. Watch me. Did I cut or tear?

A. I call that tear.

Q. You would?

A. Yes.

Q. So any piece of paper that would have an edge on as rough as this, you would call it a tear?

(Testimony of Vernon Faxon.)

A. That is what I would call it. I don't know what a person who had torn up the edges, would say. I distinctly explained I was not qualified as an expert on edges.

Q. Did you make any enlargement of that picture?

A. No.

Q. That particular one?

A. No, they didn't have the negative.

Q. You couldn't make an enlargement because you didn't have the negative?

A. I could, by taking a photograph of that, and that is an enlarged photograph; but you would lose a great deal of detail in that. Furthermore, this was just called to my attention last Saturday—I believe it was.

Q. If you had an enlargement of that picture from the negative you could tell much more clearly——

A. It would be easier to see, because you would not have to look at one little fine point at a time, or go over it; but I don't think [179] it would be any clearer.

Q. You could tell better what proportion was cut, and what proportion was torn?

A. Yes, unless you took a microscope and went over each little piece and made a detailed examination. You could tell at a glance much better, but the majority of them will not show even with enlargement. That that is out of focus, that you see the blur with the microscope, would also blur with your enlargement.

Q. Could you tell me from looking at this photograph how wide those strips of excelsior are?

A. No, I wouldn't attempt to do it.

Q. Have you any idea?

A. Well no; I might be able to figure it out; all a matter of proportion, and I would measure the board there.

(Testimony of Vernon Faxon.)

Q. Measure what board?

A. The board running across there. You might be able to do it from that, but—well you can't even tell that, because those boards you don't know how wide they are. Offhand I would say it looked to me right around a quarter of an inch, but I may be off an inch. Looks to me would be around a quarter of an inch.

Q. You can't really tell by looking at this photograph?

A. I can't; maybe someone——

Q. I mean you can't?

A. No, I wouldn't attempt to.

Q. How extensive was your examination?

A. Just as you will see here.

Q. You made the same examination before you came?

A. Yes, sir.

Q. As you have made here in court?

A. It was brought to me and asked if any of these were jagged, or if they were machine-cut, and I——

Q. Reached a conclusion?

A. I just showed Mr. Fenlason what I have attempted to show the Judge. [180]

Q. That there were some of them that had rough edge?

A. Yes, sir.

Redirect Examination

Questions by Mr. FENLASON:

Mr. Faxon, can you explain to us why we are not able to read or distinguish the small letters upon these strips of excelsior?

A. Well I didn't know that there were any letters there. Will——

Q. Assuming that that was newspaper stock, old newspaper

(Testimony of Vernon Faxon.)

stock, will you tell us why you couldn't read the—see the letters on the strips, under the microscope?

A. That couldn't be done for several reasons, any one of which you could guess at. They could use what is known as a process plate, and contrast paper that would bring the white out very white, and they would not show quite the detail. Might be due to the lens of the camera; might not be any printing there; I could not say as to that.

Q. Mr. Faxon, when I asked for this examination did I advise you that my client was unable to pay for a detailed examination?

Mr. WINTER: Objected to as immaterial and irrelevant.

COURT: Sustained.

Q. Were you directed not to find any straight excelsior?

Mr. WINTER: That is objected to as not proper direct examination. That is proper cross examination.

Mr. FENLASON: This is redirect, may it please Your Honor. They brought out the point that all he was looking for was ragged edge. I think we are entitled to show that he was not searching for that only.

COURT: Yes, he may answer.

A. No. I was asked if the edges—if I could determine whether the edges were ragged or straight like clear machine-cut edges; and anybody can take a microscope and know as much about it as I did by looking at it; anyone can see through a microscope and see it. [181] I called attention to a ragged edge there, and then I asked him is that for you, or against you.

Q. You didn't know until that time whether it was for me or against me?

A. No I did not.

(Testimony of Vernon Faxon.)

Recross Examination

Questions by Mr. WINTER:

But they did seek to find some ragged edges in there if you could?

A. Afterwards. After I called his attention to them. He asked me first if they were ragged edges or machine-cut edges, and you will remember was one of them that hangs down this—the one you enjoyed so much when you said it was the best one yet; that happened to be the first one I put a glass on.

Q. That is the best one you found?

A. No I said——

Q. Ragged edge.

A. You might call it the worst one.

Q. Do you know anything about newspaper photograph?

A. I don't know wherein it differs from the other, only that they were a newspaper photograph; is generally—a great many times is retouched an awful lot.

Q. Do they take photograph through a screen, or something, when they take for the newspaper? I don't know, I just ask you.

A. No, the photograph is not taken through a screen, but I think they have a screen someway in connection with making newspaper print, and when Mr. Fenlason first called me on the phone I asked him about this. He asked me if I could tell from a newspaper print, and I told him no.

Q. But that would not appear on these photographs?

A. Oh no, that has nothing to do with these photographs we have here; these were not taken through a screen. [182]

JACK CONVERSE,

called as a witness for Defendant.

I came to Portland in about 1929 as an employee of Mr. Antonsen in the capacity as salesman paper containers at first and paper excelsior in about 1931. I learned of Mr. Hedrick and paper excelsior business. I talked to Antonsen about the excelsior made in Antonsen's machine; he never told me the difference between his excelsior and that made on the Rafter machine. The only excelsior I knew anything about that was supposed to be different was that made by another company in Portland which is now out of business, as I understand.

V. C. SCOTT,

called as a witness for the Defendant.

I am a wholesale paper merchant, have been for sixteen years. Was so engaged in 1924 and 1925 under the name Packer-Scott. I met Mr. Wheeler sometime between 1923 and 1925. I had never contacted paper excelsior before meeting him. He solicited our business for paper excelsior. I examined the product and purchased it. We resold it again, and used a very small portion of it, was bought for resale. My first real and careful examination of the excelsior was made at Mr. Wheeler's plant. I went out to see how the excelsior was made. Went through it carefully. I examined it carefully, because it was a new product to me. We had used wood excelsior and I wanted to see if paper excelsior was practical, whether it was clean enough to meet requirements, and didn't want to sell a product that would kick back and get us into trouble. The excelsior appeared about a fourth of an inch in width, with ragged or irregular edges. We discontinued using the excelsior about a year and a half or two years ago because

(Testimony of V. C. Scott.)

the manufacturers were having some kind of trouble, and prices got so low it was not profitable to handle it as a jobber. After the first examination I made, and we had decided to take on distribution of the excelsior, I don't remember examining it carefully since then. Defendant's Exhibit J is a fair sample of excelsior I first observed back in 1924. [183]

Cross Examination.

We first bought our excelsior from Mr. Wheeler, the Paper Excelsior Company, which later was run by Mr. Hedrick. Our business is that of paper merchants, wrapping paper, twine, cordage, rope, some chemicals. We are jobbers only. I don't know whether we are buying any paper now from the American Chemical Company or not.

CHARLES A. WHEELER,

called as a witness for Defendants.

I have lived in Portland, Oregon, since 1924. Prior to that I lived in Seattle. I knew Mr. Rafter there. I met Mr. Rafter through Miss Hattie M. Hedrick, sister of Mr. Hedrick. I saw Rafter at his Ballard plant, which was a paper excelsior factory in December of 1923, or January 7, 1924. I examined the paper excelsior machine, and watched it operate, and saw the product it made. Rafter's machine operates just like Mr. Hedrick's machine operates now. The machine had discs mounted on two spindles, and newspaper was fed into the discs. There was an endless apron that the papers were fed in on, and the paper came in contact with the discs, it was torn into shreds, and thrown onto the floor, or into a pile in front of the machine. The shreds

(Testimony of Charles A. Wheeler.)

were projected two to two-and-a-half feet from the machine. The edges of the excelsior were rough, as torn paper always is. I examined the discs, and saw they were separated. They were not in facial contact. They were separated about one sixteenth of an inch. I decided to have a machine like this, and ordered one from Mr. Rafter's, and entered into a contract, which written contract was introduced and admitted in evidence as Defendant's Exhibit O. I met Antonsen at the plant. I don't remember any conversation with him. My machine was completed by Rafter on June 11, 1924. I installed the machine in Portland in August, 1924. I tested the machine before I left Seattle. It seemed to work all right. It produced torn edges. I installed the machine at 769 Savier Street in Portland, which was a basement of a duplex house. That was the premise that we visited. I operated the machine [184] and sold the excelsior and maintained a record of my transactions in a day book, which was admitted in evidence as Defendant's Exhibit P. My first customer was Stubbs Electric Company, on September 8, 1924, then Tru Blu Biscuit Company September 9, 1924, W. C. Allen Candy Company, September 10, 1924, Edward Holman and Son, June 3, 1925. My first sale to Packer-Scott Company was on October 2, 1924. I sold them torn excelsior manufactured by me on my machines. There was no inside finish in the basement, just joints between the casings. That left considerable air in. When it began to get cold in the fall or early winter of 1924, I stuffed paper excelsior behind the facing of the little bay windows in front of the shop. That excelsior was out of my machine. I returned to the premises in April of this year to see if the excelsior was still there. Mr. Hedrick went with me. We found the excelsior still there. I took a sample of that excelsior, marked Defendant's Exhibit Q. Defendant's Exhibit E is another portion of the excelsior I took

(Testimony of Charles A. Wheeler.)

from the same place on the same premises at the time the Court visited the premises. This was part of the excelsior I placed there in 1924. Defendant's Exhibits C, D, and F, being newspapers dated 1925, were placed about the casings and coverings of my basement plant to further reduce the draft. They were not placed there at the same time. I don't know positively what year I put them there, but I know it wasn't in 1924, because the excelsior was the only fender I used that year. I continued to operate at the Savier Street location till March, 1929. When I first installed the machine it was in as nearly the same mechanical condition as when I took delivery of it from Mr. Rafter, as I can describe it. I installed the machine and operated it in my basement plant. I did not make any mechanical changes in it. I put a fly wheel on it that took the place of an ordinary nut that held the spring, which is now held by the fly wheel. The nut was fastened by thread. I did not change the discs or the spreaders. I put additional longitudinal strips on the machine for the purpose of forming rests at the top and bottom to form a fulcrum for the tool I [185] used to clear the paper from between the discs when they became filled. There were no other changes made in the machine. During all that time it produced the same kind of excelsior. I saw the Hedrick machine operate the other day at Hedrick's place of business. Its operation was identical, as far as I could describe it, as when operated by me; it produced the same kind of excelsior, and stacked, piled and commingled in the same way. Antonsen visited my place of business in Portland. I can't fix the date when. He was there three times, perhaps more. I found by experimenting, twenty-four thicknesses was about as much as could be fed without slowing the machine. The machine did clog on some occasions. That is when I fed more than twenty-four thicknesses, then the thing stopped

(Testimony of Charles A. Wheeler.)

dead. If there were any foreign substances in the paper, it would also make the machine stick. The discs never got hot, made any grinding noises, smoked, and I never lubricated them. I sold my business and shredder to Mr. Hedrick in March, 1929. I can make 125 pounds of excelsior in ten minutes on my machine. I would weigh in 125 pounds of paper, place it on the paper, start the machine, feed the paper through. It was to make one bale. I had no helper. Defendant's Exhibit R admitted in evidence. Defendant's Exhibit S admitted in evidence.

Cross Examination.

I saw the Rafter machine operate at least five or six times before I came to Portland. On each occasion I examined the product to see how it was made. I saw Mrs. Wright operate the machine. I examined the excelsior made on the machine when Mrs. Wright was operating it, and it was torn. No part of it was cut. It was all torn. After Antonsen bought Rafter's machine I helped Rafter set the machine up in Antonsen's place of business, and saw the kind of excelsior produced. It was all torn. At that time the blades on the Rafter machine were dull, to my knowledge they were never sharpened. I took my machine apart after having tried it out in Seattle, in order to move it. I took the cylinders with the discs [186] on them out of place, and put them back in the same relative position when I set them up again. I put a fly wheel on the machine. I don't remember what year, I think it was 1925 or 26. To put the fly wheel on I took the nut that belonged on that end of the shaft that held the spring in place, went to a machine shop to put a thread on the fly wheel, to set that shaft the fly wheel acts as a nut to hold the spring in place. The purpose of putting the fly wheel was to balance the heavy drive wheel, the pulley, not to act as a nut for the spring, though it served such purpose. The cross brace bars were added as an

(Testimony of Charles A. Wheeler.)

additional change to the machine. I was present when the machine was operated for the court's inspection the other day. I noticed a little retention of paper between the discs. That retention of paper was in two or three places, was not enough to clog the machine. One place was on the right hand end as you faced the machine, and another towards the left from the center. It is possible it clogged more toward the right hand end of the machine than any other place. When I operated the machine it clogged once in a while. When I was operating the machine, the clogging usually was general. I don't know that two of the discs on the right hand side facing the machine are in contact. To my remembrance there were no discs in facial contact when I bought the machine, though they were not equally spaced, they were spaced from a thirty-secondth to a sixteenth of an inch apart, and that is the way the machine worked when I bought it. As I understood, the exclusive right to operate in Portland provision of the contract protected me from anyone else shipping in like kind of stock. Mr. Rafter said he had applied for a patent, and I presumed that would be the protection. The edge of the discs on the machine I bought from Rafter were variable in thickness, but none of them had an edge. I never sharpened the knives on my machine. The spring was there to hold the discs in the relative position, and tended to keep the discs from getting farther apart than a thirty-secondth or a sixteenth of an inch. Only Mr. Hedrick was with me when I found [187] the excelsior in the basement of the building in which I had had my factory. The time I moved in to that basement factory there was merely the outside finish, outside casings, and joints were open between the window facings and the finish, and that let the cold air come in. I moved in in the 11th of July, 1934. Then when I sold to Mr. Hedrick, he ran the machine in that same basement for sometime

(Testimony of Charles A. Wheeler.)

after I sold it to him. The spacings in the front of the building were made by 2x4 studdings, some of which were two or three inches apart, and some up to 18 inches. In the fall or winter of 1924, I put excelsior in there. I did not put any newspapers in there then. There are three windows in front facing the street. The paper excelsior I put in was around the casings of these windows, and under parts of them, and no place else. The places that the newspapers were found at were left open in the winter of 1924. Defendant's Exhibit Q was found by me April 14. At that time I examined it, handled it in the presence of Mr. Hedrick. At that time I did not look to see if there were any strips in it that were dated. At the time I offered in evidence the newspapers that had come back from there, I saw two dates on them. Nobody had called my attention to those dates. I noticed them myself. Before I saw the dates on those newspapers I was not of the opinion that I had put the newspapers there in 1924 or 1925. I do not remember saying in the presence of Mr. Pierce, McDougall and Mr. Winter at the plant during the time of its examination by the Court that I had put the excelsior in there in 1924 or 1925. I didn't say that if the newspaper had a date of 1925 then it was likely 1925 when I stuffed the excelsior in there.

I bought most of my paper from the Telegram and Portland News, some of it from the Salvation Army. I fed it to the machine, sometimes the whole issue and sometimes taking it apart, depending on the thickness of the issue. Up to a 24-page newspaper I would feed it through. The witness was handed a photograph being Exhibit K, [188] and asked if he noticed a fly wheel on it, and the witness testified "Yes". When I got my machine it didn't have that fly wheel on. With reference to the nuts on each end of the spindles holding the disc, I had occasion to tighten one of the check nuts on each of the cylinders because

(Testimony of Charles A. Wheeler.)

they worked loose. I don't recall how often that happened. I just kept track of them, noticed them once in a while. If I found them loose I tightened them. This was perhaps as often as every month. I have the same discs on the machine that were on there when I got it. I last observed the machine yesterday about noon, before I testified. I did not observe that any of the discs were in contact. I examined the discs then to see if they were in contact. They were all separated. Before I went down to the old plant on Savier Street on April 14, I talked to Mr. Hedrick about going down there and finding old excelsior. Mr. Hedrick told me it was important to find such excelsior. I didn't remember then of putting this excelsior in between the windows, but when I found it there, I remembered I had put it there. I manufactured excelsior in that place in 1925, 1926 and 1927. When I found this excelsior around the windows I remembered putting it in there in the fall or early winter of 1924. I don't remember how many coils there are on the spring that was on my machine. I never changed the spring. It is the same one that came with the machine. When I found the old excelsior, Defendant's Exhibit Q, I carried it with me down to Mr. Hedrick's plant, and was given an envelope and placed the excelsior in it. I then carried it home with me.

Re-direct Examination.

Defendants Exhibits T and U are replies to letters from Antonsen. My signature appears on them. Received in evidence.

CECIL A. BERRY,

called as a witness for Defendants.

I have lived in Portland since 1917, and am interested in pictures and photography in general. It has been my hobby for 25 years. I took some pictures for you, using my camera. The [189] pictures are Defendant's Exhibits 3 and 4 of the deposition. Exhibit 4 is a photograph of the two rolls taken to show the separation. There is light to the rear of the rolls. This is an enlargement of the picture I took. The pictures were taken of the Defendant's machine.

Cross Examination.

Exhibit 4 represents only a portion of the circular knives on the machine, just the center of the cutting rolls. I have marked Exhibit No. 3, thirty-eight discs from the left, that is where Exhibit 4 starts. Exhibit 4 is an enlargement of approximately fifteen times. Because of the angle of view of the camera, only the center discs show a separation, and those discs on the outer edges of the rolls do not show such separation in Exhibit 3. Exhibit 4 was taken out of the center of Exhibit 3, and enlarged in order to show the separation.

Redirect Examination.

Defendant's Exhibit V admitted in evidence, which is the negative from which Defendant's Exhibit 4 was taken. The camera was positioned directly in front of the rolls, parallel with the intersection of the two with one light in the front shining on the rolls, and one directly behind to show light through the rolls. The picture reveals the true relationship of the discs where they are parallel with the center or axis of the lens. Those which are to the left or to the right are not shown in their true condition. The Court then stated that it would take judicial notice that a camera shows only what is squarely in front of it.

(Testimony of Cecil A. Berry.)

Recross Examination.

I took those pictures, I think, sometime in January, 1933. It might have been December. At the time I took the pictures, not a single disc on the whole of the two rolls were in contact with the opposing discs.

Redirect Examination. [190]

There was a varying degree of separation between the inter-meshing discs.

C. C. HEDRICK,

called as a witness for the Defendant.

The excelsior in Exhibit J was manufactured a week or ten days ago, on the machine I bought from Wheeler. I first became interested in the excelsior business in March, 1929, through my sister, Miss Hedrick, who took me to Wheeler's plant, with the idea in mind of buying the business. I examined the machine and equipment there, and also the discs, because that is where the wear on the equipment would show. There was only one shredding machine. I found that those discs were not in contact. In my opinion there was a separation of a thirty-secondth or a sixteenth of an inch, possibly a sixty-fourth. I didn't note any variable degree of separation between the discs. I didn't closely examine the product at that time, but did later, when I started calling on the trade. I saw the machine operate. Paper was placed on a conveyor belt which carried it to the shredding discs on the revolving spindles, which took the paper through, and threw it out on the floor. I would say the paper was thrown three feet. The process employed by the machine was exactly the same as we observed at my place of business on the tour of inspection by the Court, and the edges of the excelsior Wheeler was making were

(Testimony of C. C. Hedrick.)

the same rough jagged or feathery edges, indicating a tearing process. I never had any experience with paper excelsior before that time. My sister, Miss Hedrick, and I bought the machine. My sister has since passed away. I bought the machine from Mr. Wheeler that he had in his basement, and that is the same machine I have now. I started operating it myself March 19, 1929, and have operated it continuously since. It has never produced any different kind of excelsior since I started with it than at the present time. I have made no changes in the machine, although I have repaired it some. I have had the collar replaced on each end of the rolls, the original collars were put on by dowels or pins [191] from the collar and shaft, both sheered off. I had collars shrunk on there by heat, making them permanent, at the same place the other collars had been. In August, 1930, I had the discs re-beveled or re-conditioned. When the discs were put back onto the spindle after they had been dressed up the old separators were used, because I went to the machine shop and saw the discs off the rolls. These had been strung on a wire to keep them in sequence. There also have been some bearings replaced. There have been no structural changes. I have not intentionally or otherwise altered the machine in any way from that in which I received it. We have timed the operation of the machine. Our bales are put up in weights of 125 pounds. The paper is weighed before being put on the operating platform. I or my wife can cut the 125-lb. bale in eight minutes. That takes into consideration just feeding the paper to the shredding discs only. Twenty-four sheets of paper are about the maximum that the machine will handle, that is consistently, without slowing up the machine. It handled that many when I got the machine. The

(Testimony of C. C. Hedrick.)

capacity of the machine has remained the same since the time I got it. At times I have experienced trouble with the paper winding around the discs, and interfering with the operation of the machine. When that occurs, we have a large file which is dressed down to a point to feed between the discs, and this is used as a gouging instrument to remove the paper from between the discs. In the gouging process, the edge of the file comes in contact with the side walls of the discs. I did not know Antonsen at the time I bought this machine. He first came to my factory in 1929. He did not tell me about the excelsior he was producing. We talked about the business either in 1929 or 1930. He said he had some idea of moving the Seattle business down here. After the conversation was over, my sister told me he had not made us any offer. Mr. Antonsen suggested that we pool our interest, or words to that effect, said that he was an organizer. Defendant's Exhibit W is a letter from Antonsen, admitted in evidence. A letter from Antonsen marked Defendant's Exhibit G and admitted in evidence. [192]

Letter to Antonsen dated August 22, 1930, marked Defendant's Exhibit X. A further letter in the handwriting of Defendant's sister, marked Defendant's Exhibit Y. Defendant's Exhibit Z is a letter from Antonsen dated August 23, 1930. Mr. Antonsen's product was being sold in this territory at the time I purchased my machine from Mr. Wheeler, was being handled through his agents, Blake, Moffitt and Towne. I was present at my factory the other day at the time of inspection by the Court, and I have a sample of the excelsior taken from between the discs after it was stuck there, and a further sample of excelsior that went entirely through the machine. These samples were

(Testimony of C. C. Hedrick.)

introduced in evidence, marked Defendant's Exhibits CC and DD.

I have not paid Wheeler in full for the machine and the business. I think I owe him about \$110.00 on the balance of the purchase price, the total of which was \$450.00. When we sent the machine out for reconditioning in August, 1930, it was not necessary to be reconditioned, but we were anticipating some additional business. We have done some additional repair work since August, 1930, but have not changed the discs, but I have taken the spindles off of the machine. The nut was loosened on one end, and the discs shoved over a space, and the collar shoved onto the other end. The collar holds the discs from the other end opposite the nut. I think the collars were welded on by a machinist since 1931. I don't remember the date. One of the collars was put on about six months ago. At the time this work was done, the machine was taken to a machine shop, Helser's Marine and Marine Works. At the time I bought the machine from Wheeler, I examined the discs, and did not notice whether any of them contacted. My recollection is there was a space between all of them. I do not contend that at the present time all of the discs have spaces between them. The ones on the right end of the rolls, as you face the machine, come closer together where they come in contact now. Those are the ones opposite to where the spring is. They were not knowingly placed in contact. I don't [193] know when it was done, possibly when the last collar was shrunk on. I wasn't present when that work was done, possibly the discs were taken off at that time, but I believe not, but I do not know about that. Before that time I think there was a space between all the discs. I didn't make periodical inspections, but I surmised there was, because there was space between all of them

(Testimony of C. C. Hedrick.)

originally. I went with Mr. Wheeler on the 14th of April to the old Xavier Street plant to look for excelsior. I had been out there a few days before myself. I had noticed the excelsior. I had not examined it. I took none of it out or put any of it in. I was looking for old excelsior when I went out there. I went there because that's where the machine originally operated. I asked him to go with me, and after he saw the excelsior he said he had put it there, but he didn't say that until after he had seen it. Exhibit Q was excelsior taken out of that place by Mr. Wheeler. I examined it casually, possibly touched it, looking at it. The strips were not taken apart and examined for a date.

FRANK JACOBS,

called in rebuttal as a witness for the Plaintiff.

I have lived in Seattle about 25 years, am a photographer. Plaintiff's Exhibit 14 is a print I made, from film marked Plaintiff's Exhibit 15. Plaintiff's Exhibit 16 is a print I made from negative Plaintiff's Exhibit 17. Exhibit 16 is twice the size of the negative Exhibit 17. Exhibit 18 is an enlarged print of 16, about six diameters. Exhibit 19 is a print negative of the same print marked Exhibit 12. Exhibit 21 is a print which is an enlargement of Exhibit 20. The enlargements are correct representations of the negatives.

Cross Examination.

I do not know the relative size of the object photographed, and that object in the picture itself, it is only a guess. As to Exhibit 15, I would guess it is one-tenth or one-twelfth its natural size. Seventeen is smaller, and 20 one-tenths or one-twelfth.

(Testimony of Frank Jacobs.)

Negative 17 is a film made by a wide angle lens, and the extreme [194] corners weren't quite clearly defined, because the lens wasn't wide enough to cover the entire film. The two strips of excelsior hanging down in Exhibit 21 are in focal contact. To take a picture of the excelsior as shown in Exhibit 18, to show the edged condition of the excelsior, I would take it as 18 was taken. If a lens is out of exact focal, it will lose sharpness of detail of the edge of excelsior. This is an optical fact.

JAMES D. GIVENAN,

a witness called on behalf of the Defendant.

Direct Examination.

Questions by Mr. FENLASON:

Will you state your name, please.

A. James D. Givenan.

Q. What is your occupation?

A. I am a patent attorney.

Q. Are you registered?

A. Yes, sir.

Q. How long have you been registered?

A. Since 1925.

Q. Where is your office at the present time?

A. Here in Portland, Oregon.

Q. How long have you been in Portland, Oregon?

A. One year and one month.

Q. Before that where were you?

A. Seattle, Washington.

Q. Have you made an examination of this machine owned by Mr. Hedrick?

(Testimony of James D. Givenan.)

A. I have.

Q. State whether or not that machine has means for bodily shifting the discs on the lower spindle for the purpose of adjusting their spaced relation with the discs in the other group, on the upper spindle?

A. The lower set of discs has no means whatever for bodily shifting.

Q. Did you test the metal contained in the shredding discs?

A. To what extent, sir? [195]

Q. To any extent at all?

A. I observed that the discs, the cutting discs, were of metal.

Q. Did you test them for hardness, with a file?

A. No.

Q. With respect to the upper spindle, how it is mounted?

A. I would say that it is rotatedly mounted and longitudinally yieldingly mounted.

Q. Now assume that the intermeshing discs were in facial contact, and held in facial contact constantly by means of a spring, what if any effect would take place in the discs?

Mr. WINTER: I object to that; the witness has not shown himself qualified to answer that question at all. That is a mechanical question.

COURT: Sustained.

Q. How old are you?

A. Thirty-five.

Q. Where did you go to school?

A. St. Louis, Missouri.

Q. What University did you attend?

A. St. Louis University.

Q. How long did you attend there?

A. For three years.

(Testimony of James D. Givenan.)

Q. And what did you take up?

A. Liberal Arts.

Q. What did you do after that?

A. Moved to Seattle with my folks.

Q. Then what business did you go into?

A. The patent business; not as a patent attorney, but I was learning the business as a patent draftsman, to begin with.

Q. You drafted various machines?

A. Yes, sir.

Q. Are you familiar with the mechanics of machines? [196]

A. Yes, sir.

Q. Have you designed any machines, or assisted therein?

A. I have assisted in machine design.

Q. Who were you employed by in Seattle?

A. Boeing Airplane Company.

Q. In what capacity?

A. As a patent attorney.

Q. Are you familiar with the degree of wear that takes place with different metals touching each other in surface contact?

A. Yes, sir.

Q. In your experience have you come in contact with various kinds of machines?

A. I have.

Q. Have you studied mechanics?

A. Yes, sir.

Q. I will ask you, in your opinion, what would take place with respect to discs if the discs you observed on this machine were in facial contact and were maintained in facial contact by means of a spring at all times?

A. What would happen, do you say?

(Testimony of James D. Givenan.)

Q. Yes.

A. Wear would occur between the rubbing discs, you might say.

Q. What would be the extent of that wear, taking into consideration the speed at which these discs were operated as you observed the other day?

A. Regardless of the speed of it the discs would wear to a point where you might say they would be in frictionless contact, so to speak.

Q. Now that machine is there any—would there be any shifting of the upper spindles when a plurality of sheets of paper were run through that machine?

Mr. WINTER: I object to that; witness has not shown himself qualified to answer that question. [197]

COURT: His experience hasn't been very well developed. Just a question of whether I will let it go in and assign it less weight. I think probably he has not shown sufficient qualification. He need not answer at the present time.

Q. What experience have you had with various kinds of machinery?

A. Well in the pursuit of my profession I am brought constantly in touch with machines of various kinds, devices of various kinds, and obviously we are always observing the details of the construction of the machines, various machines.

Q. What kind of machines, for example, have you been brought in contact with?

A. Well that is—that takes in a lot of territory, sir, as anyone in this business knows. We contact everything from safety-pins to locomotives, you might say.

Q. Did you observe any movement in the upper spindle during the operation of the machine the other day, down at Mr.

(Testimony of James D. Givenan.)

Hedrick's place, when you fed—when paper was put through the rolls?

A. I did.

Q. What movement if any did you observe with respect to the upper spindle?

A. I noticed that the movement—the upper spindle moved longitudinally with respect to the lower spindle.

Q. In a machine of that class where you have longitudinal movement of the upper spindle with relation to the lower spindle would that ever cause the cessation of the operation of the machine?

A. No.

Q. Did you observe the manner in which Mr. Hedrick cleared that machine?

A. I did.

Q. Would the continuous use of that reflect in any way upon the side surfaces of the discs?

A. It would.

Q. In what way? [198]

A. Wear would occur.

Q. And you may state whether or not that would cause a wider separation as between the discs?

A. It would.

Q. Did you cause, after the examination, that machine to be partially dismantled?

A. May I hear your question again, please?

Q. Yes. I say, after the inspection we had down there, did you cause the machine to be partially dismantled?

A. I did.

Q. Did you examine the separators that were between the discs on the upper and lower rolls?

(Testimony of James D. Givenan.)

A. Yes.

Q. What were those discs made of?

A. Fiber.

Q. The separating discs, that is?

A. The separating discs were made of fiber.

Q. Were the discs—were those washers uniform in thickness?

A. No, sir.

Q. And did you examine any of the discs themselves?

A. Yes.

Q. By what instrument did you examine them?

A. I didn't personally examine them, but I observed another person examining them by the use of a micrometer.

Q. Did you observe any slight—any difference in the thickness of the discs themselves?

A. We did.

Q. A slight difference?

A. Yes.

Q. I will ask you to state whether or not in your opinion, using the materials which were used in these shredding discs and spacers, it will *practically possible* if desired to bring all of the discs [199] into facial contact?

A. I think it would not be possible.

Cross Examination.

Questions by Mr. WINTER:

You went to the University of Missouri, did you say?

A. St. Louis University.

Q. St. Louis University?

A. Yes.

Q. You took a course in Liberal Arts?

A. Yes.

(Testimony of James D. Givenan.)

Q. Stayed there for about three years?

A. Yes.

Q. Didn't graduate?

A. No, sir.

Q. What were you when you quit the University?

A. Senior.

Q. You were a senior. How much of your senior work had you done?

A. About two months.

Q. Then you moved to Seattle?

A. Yes, sir.

Q. When you came to Seattle you took up the work of what?

A. Patent Attorney.

Q. Right away when you came to Seattle?

A. Well no, not right away.

Q. What did you do when you first came there?

A. Well I did quite a bit of drafting, mechanical drafting.

Q. For whom did you work?

A. I worked for a man by the name of Frederick P. Gorman, of Seattle.

Q. What is he?

A. He is a Patent Attorney.

Q. Patent Attorney?

A. Yes. [200]

Q. What do you mean by saying you did a lot of drafting?

A. I did a lot of patent office drafting for him.

Q. What did he give you?

A. Salary.

Q. No, I know that; but from what would you make the drafts?

A. Drawings, blue prints, machines, models.

(Testimony of James D. Givenan.)

Q. Who made the drawings for the blue prints?

A. Either the inventors themselves, or those engaged by the inventors.

Q. Did an engineer make those?

A. I couldn't tell you, sir. Some were made by engineers, others were made by the inventors themselves.

Q. But you made your drawings from the blue prints?

A. Yes, sir.

Q. How long did you do that kind of work?

A. About three years.

Q. About three years. When did you reach Seattle?

A. Well I made several trips back and forth; I located there permanently about 1923, somewhere in there.

Q. You located there in 1923, when you left the University of St. Louis, didn't you?

A. No I went back to the University, I made several trips.

Q. Now you quit the University when you had about—when you were in your senior year?

A. Yes.

Q. As I understood then. Then moved to Seattle?

A. Yes.

Q. When did you locate in Seattle?

A. About '23.

Q. That was before you had finished your university course?

A. Yes.

Q. Then the next three years you spend in drafting?

A. Yes, sir. [201]

Q. And when did you first locate in Seattle?

A. About '22 or '23.

Q. Then you were admitted as a patent solicitor?

A. Yes.

(Testimony of James D. Givenan.)

Q. When?

A. My official registration is dated—let's see, I think this was the latter part of 1928, or the early part of 1929.

Q. Did you do anything between the dates you located in Seattle until you were admitted as a patent solicitor, besides work as a draftsman?

A. No.

Q. Now then is the time when you came in contact with various machines?

A. Yes, sir.

Q. From a pin to an engine.

A. Yes, sir.

Q. During that period?

A. Yes, sir.

Q. Now then when did you start to work for the airplane company?

A. 1927.

Q. 1927. And you moved here to Portland about a year ago?

A. Yes, sir.

Q. When did you leave Boeing's employ?

A. November 15, 1930.

Q. What did you do when you were with Boeing?

A. I was their patent attorney, and I prepared patent applications. I had a patent draftsman working for me; he worked under my supervision making patent drawings, and from those drawings I prepared the patent applications.

Q. You prepared the application, specification, claims, etc.

A. And claims.

Q. When did you say, again, you were admitted as a patent solicitor?

A. My official registration from the Patent Office is dated, as

(Testimony of James D. Givenan.)

I [202] said, either in late 1928 or early 1929; I think February 1929, but I would not swear to it.

Q. Of course before you were admitted to the Patent Office you could not put through a claim for a patent?

A. I could in this way: That the Commissioner of Patents would recognize certain applications that were prepared and filed and prosecuted by a person seeking registration.

Q. And that is what you did?

A. I did prepare certain papers like that, yes.

Q. Now you said that these discs would rub; what did you mean by that?

A. That was intended as an answer to the question just before that. I don't remember the question.

Q. When you said the discs when they were operating, if they were in contact they would rub?

A. Yes, I said that.

Q. What did you mean by that?

A. That friction would be created between the discs; they would rub one against the other if they were brought in contact.

Q. Now will you look at that picture; those discs run in opposite directions don't they?

A. Yes, sir.

Q. When they come in contact both of them run at the same speed, don't they?

A. Yes, sir.

Q. They don't slide past each other?

A. Do those discs come in contact, the upper with the lower?

Q. I don't know whether they do or not, but assuming that they do.

A. You mean on the peripheral edges?

Q. Yes.

(Testimony of James D. Givenan.)

A. There would be no rubbing between the peripheral edges.

Q. There would be no rubbing between the peripheral edges? [203]

A. No, sir.

Q. There wouldn't be any rubbing between the edges of this machine if they came in contact, would there?

A. You are speaking now of peripheral edges?

Q. Yes.

A. Would be no rubbing, no sir.

Q. Even after they came in facial contact?

A. Facial contact of course is one thing, and peripheral contact is another.

Q. What?

A. Peripheral contact——

Q. I mean peripheral contact, around the edges.

A. There would be no chafing or rubbing, no sir.

Q. There wouldn't be any?

A. No, sir.

Q. There wouldn't be any material wear, therefore.

A. In the peripheral edges, correct; but we are not concerned about peripheral edges.

Q. Now suppose they were overlapping one sixteenth of an inch; would there be any rubbing if they came in contact?

A. If they did run—if they were running in contact there certainly would be rubbing, yes.

Q. You mean one would run up against the other one?

A. There would be rubbing, there would be friction between the two.

(Testimony of James D. Givenan.)

Q. Now you say there is—you said something about clearing. How closely did you observe the defendant's machine?

A. At what time, sir?

Q. At any time. How often have you examined it?

A. Twice only.

Q. Was that the first time you examined it, when we were all up there inspecting it?

A. No, I will change that; I have seen that machine three separate times. [204]

Q. You had examined it before that?

A. Once before we all went up, yes.

Q. To what extent did you inspect it at the first time you saw it?

A. The first time we had it operated. Then I placed a light behind the rolls, that is, the shredding discs, and we made that observation of the light shining through, and that is about all.

Q. You watched it operate, and you watched to see whether the light would shine through it?

A. Yes, sir.

Q. When it was idle?

A. Yes, sir.

Q. Then you examined it again when we were up there, when the Court inspected it?

A. Yes, sir.

Q. And then you made—you took it down partly and examined it again. Now you said—or talked something about clearing the machine; what did you mean by that?

A. I don't recall saying anything about clearing—oh, you mean clearing fouled sheets that had wrapped on them?

Q. Yes.

(Testimony of James D. Givenan.)

A. I said nothing about that except I answered his question as to whether or not I observed the means used for cleaning the shreds from between the discs.

Q. You had observed the means for clearing the shreds between the discs?

A. Yes.

Q. What were those means?

A. It was a file.

Q. A file?

A. Metallic file, yes.

Q. Did I understand you to say that would cause wider separation of the discs, sticking the file in there? [205]

A. I said that wear would occur on both faces of the two opposing discs—I won't say both faces, but the opposing faces of the two opposite discs, by reason of the fact that the file would contact both of them.

Q. Did you say that would cause wider separation between the discs, or didn't you?

A. Obviously would.

Q. In what way?

A. In width.

Q. How?

A. You mean how would it cause it?

Q. Yes.

A. How it would cause it?

Q. Yes.

A. It would have the effect—holding a file against a metallic disc rotating as those are, it would be in effect the same as a cutting tool on a lathe, against the metal being dealt with.

Q. Do I understand you to say that the clearing of these discs

(Testimony of James D. Givenan.)

with a file in the manner it was done, would cause these discs to be wider apart on top?

A. I say that wear would occur at those points on the faces of the discs contacted by the file.

Q. But that would not change the relationships of the discs at all?

A. Would certainly change the relation of their edges.

Q. It would change the relation?

A. Surely.

Q. In what way?

A. In width.

Q. Then the more you filed them the wider the strips of excelsior would be that you would make with the machine?

A. No I think not, because you would be working within a fixed space from one end of the machine to the other. [206]

Q. Then let me get that clear. Then the clearing of the machine by means of a file would not cause the edges to be wider apart, would it?

A. Yes it would, as the wear——

Q. If it would cause the edges of the discs to be wider apart wouldn't it produce excelsior that the strips would be wider?

A. I think not, because the peripheral edges of these discs would cause the paper to break between them.

Q. So the distance in which the discs are set apart has no relation really to the widths of the strips of excelsior?

A. Yes it does.

Q. Now did you notice when that machine was operating there, that there were some discs that were in contact?

A. Yes.

Q. What discs were in contact?

(Testimony of James D. Givenan.)

A. I noticed the two at one end of the machine down there—I have forgotten which, I believe it was the right hand side as you face the discharge end.

Q. It was the opposite side from the spring?

A. Correct.

Q. They were in contact?

A. Yes.

Q. Did you notice that in feeding the machine, in operating it, that the paper rolled around the discs on the right hand side where they were in contact?

A. No, I didn't observe that, sir.

Q. You didn't observe that at all?

A. Did you say the right hand side?

Q. Yes, where the discs were in contact.

A. I didn't notice that?

Q. You didn't notice that?

A. I noticed shreds adhering between the discs at various places [207] throughout the length.

Q. Didn't you notice particularly there were more at the right side, where the discs were in contact?

A. No, sir.

Q. You didn't see that?

A. No, sir.

Q. You dismantled the machine?

A. I had it dismantled, yes.

Q. Who was with you?

A. A young mechanic here in town.

Q. What is his name?

A. John Gerrish.

Q. And he took the machine apart?

A. Yes, sir.

Q. He took the discs off?

(Testimony of James D. Givenan.)

A. Some of them, yes.

Q. On what side did he take the discs off, on the right side?

A. I don't recall, because when the two rollers were on the floor I couldn't tell which side the discs came off of.

Q. The upper roller has the spring at one end.

A. Yes, but you had reference, didn't you, to either left or right hand ends of each roller?

Q. Yes; but had a spring on one end, that is, on the left side facing?

A. Yes.

Q. Did you take any of the discs off the upper roll?

A. We did, yes.

Q. You don't know whether you took them off from the side where the spring was, or the other side?

A. We took them off the right hand side, that is the only side you could take them off.

Q. That is the opposite side from the spring?

A. Yes. [208]

Q. And how many discs did he take off?

A. About ten, I would say.

Q. You found some thicker and some thinner?

A. Yes.

Q. Where did you find the thin ones?

A. I don't recall; we didn't make observation where we got the thin ones from.

Q. What caused these discs to be in contact at the right hand side, and were not in contact anywhere else on the machine?

A. Oh it might have been through maladjustment of some kind, or it might have been caused by the various thicknesses of

(Testimony of James D. Givenan.)

the spacers, the varied thicknesses of the shredding discs themselves.

Q. But you don't think it was due to the fact that the washers were thicker on the upper spindle near the place where they came in contact?

A. I couldn't say as to that, I didn't observe it closely.

Q. You didn't observe that. But there were some washers that were thinner than others?

A. Yes.

Q. In your opinion it would be impossible to make a machine where all of the discs would be in contact?

A. Well it might, by very careful precise work; it might be done, but I imagine it would be very difficult to keep them in that condition.

Q. You think it would be difficult to keep them in contact?

A. Yes.

Q. Now I hand you Plaintiff's Exhibit No. 14, which is a picture of the Antonsen machine, picture of the machine purchased by Antonsen from Rafter.

A. This is that machine?

Q. Yes, that is the machine purchased by Antonsen from Rafter; and I will ask you to examine the spring.

A. Where?

Q. On the machine. [209]

A. The spring?

Q. Yes, the coiled spring.

A. It is a perspective view of something there on the end of that shaft. I am not sure whether that is a spring or not.

Q. What do you think it is?

A. Might be a plurality of washers.

Q. You think that might be a plurality of washers?

(Testimony of James D. Givenan.)

A. It might be, could be.

Q. You can't tell from looking at that whether it is a spring or washers?

A. It is a coiled spring.

Q. Now how many coils in it?

A. I would say four turns, four coils.

Q. How many coils were in the spring on the defendant's machine?

A. I didn't observe that, sir.

Q. You did not observe that?

A. No, sir.

Q. Would you say the spring on the defendant's machine was like this coiled spring?

A. I would say all coiled springs are alike, yes.

Q. No matter how many turns in it?

A. Oh yes, they may differ in length, of course.

Q. Would you say it was as heavy as this one?

A. You mean that this one is as heavy as the other?

Q. Yes.

A. No, I couldn't say about that, hard to tell from this photograph.

Q. You don't know whether it has as many coils, or more coils?

A. No, sir.

Q. Now assuming that a machine was built so that the discs all came in contact, in operating a machine would it remain or would it not remain in contact?

A. It would remain in contact until those abutting surfaces wore [210] out of contact.

Q. About how long do you think they would remain in contact?

(Testimony of James D. Givenan.)

A. It is very difficult to say, that would be determined by the speed of the machine, and the hours of use, etc.

Q. Do you know what the speed of this machine is?

A. No, sir.

Q. You haven't any idea what the speed is?

A. Oh I have an idea, yes.

Q. Don't you know what the speed of that machine is?

A. I don't know how many R. P. M. it turns, no.

Q. Suppose they operate the defendant's machine on an average of eight hours a day. How long in your opinion would those discs remain in contact?

A. At that speed?

Q. Yes, running at the speed you saw it run.

A. I don't think it would last very long.

Q. What?

A. I don't think they would stay in contact very long.

Q. Can you estimate the time?

A. That depends on the kind of metal used, the lubricant used, etc.

Q. The lubricant? What would you use a lubricant for?

A. I say, if you should apply a lubricant between the abutting faces, the life would be prolonged.

Q. Not applying any lubricant at all.

A. Just metal to metal?

Q. Yes. If they were in contact how long would they remain in contact?

A. In the defendant's machine?

Q. Yes.

A. They wouldn't remain in contact very long.

Q. Very long. Can you give me some idea, weeks, or months?

A. I think it would be a matter of hours. [211]

(Testimony of James D. Givenan.)

Q. You think it wouldn't even remain in contact a couple of days?

A. I don't think so.

Redirect Examination.

Questions by Mr. FENLASON:

Just one question for the record. You said there was a difference in thickness. Give us the amount of these variations that you recall.

A. I don't recall them now. The mechanic that did the work tabulated them on a piece of paper, and he has that in his possession. I haven't seen it from that day to this, and I don't recall.

Q. Was it in the thousandths?

A. Oh thousandths.

Defendant rests.

CLARENCE W. PIERCE,

called as rebuttal witness for Plaintiff.

I have been an attorney since 1925, and live in Seattle, I visited the old Wheeler shop on Savier Street at the time it was inspected by the Court. I visited the place again last night, and searched for some excelsior that had been placed between the windows on the front portion of the building. I took some of the samples of excelsior and have them here. At the time I got them, Mr. Antonsen, Plaintiff, and Mr. Smith were present and in their presence I made a drawing on the back of this envelope indicating the building; and the windows in the front portion,

(Testimony of Clarence W. Pierce.)

and the two-by-fours between the windows. The letters initialed A, B, C, and D on this drawing about the curlycue marks indicated where the different samples of excelsior were found. Plaintiff's Exhibit 22 is the sample of excelsior found at D. Mr. Antonsen also brought a sample which was kept separate from mine. After obtaining my sample I put it in this envelope at the plant. Then I took it to Mr. Winter's office, and there examined it strip by strip in the presence of Mr. Winter, Mr. Antonsen and Mr. Smith. We must have returned to the office, about 7:15 in the evening. We got into the building by borrowing the key next door. In my sample I found certain year dates. Also I examined a portion of the excelsior at [212] the plant, and placed several dated strips of excelsior in a tin box. They are all in the sample, within the dates. Plaintiff's Exhibit 23 admitted in evidence, as dated strips. There are several strips fastened together with a paper clip, because they naturally join. Those strips show a section of the want ads dated in 1925. There is excelsior left up there in the place. We purposely did not take all of it.

Cross Examination.

When we went to the building for the samples of excelsior we went in Mr. Smith's automobile. Mr. Smith, at the present time, is working in the Portland territory for a company Mr. Antonsen operates. In the sample of excelsior Mr. Antonsen brought back we found one date as late as June, 1925. In my sample of excelsior I found a number of shreds with 1925 on them. The sample of excelsior that we brought back from Wheeler's plant were in the same places that excelsior was taken out of on the Court's inspection trip, except that the part we got was stuck clear up in top. We did not pick any of the excelsior from off of the floor. In fact, we didn't even look at it. The only boards we

(Testimony of Claude C. Rafter.)

took down to get the excelsior were square box boards right at the level of the window. Those are built from the bottom to the top, and it was in the top of these sills we found the excelsior.

CLAUDE C. RAFTER,

called as a witness for Defendant, and called out of order by permission of the Court.

I am the Mr. Rafter who testified on deposition in Seattle. I found the old excelsior in my shop yesterday noon, and phoned Mr. Hedrick to see if it was too late to put it in the case. It was under some gunny sacks I had piled up, and it got thrown around the shop, and this is the excelsior I had found and testified to in the deposition. Excelsior produced, marked Defendant's Exhibit EE. This particular excelsior was made on the machine I sold to Antonsen and was made sometime in November, or December, 1923. I identify [213] that date because at that I time I was in the confectionery business, and after I developed the excelsior business I gradually went out of the candy business, and I put candy boxes away with glasses, and packed it in some excelsior. This is a part of the excelsior used in that packing. Since 1923 the excelsior has been over in the attic of the store owned by me when I left in 1924. I nailed that attic up and was back in Detroit for 4½ years. When I came back I didn't enter that place until a short time ago, when I was looking for some glass for a friend of mine. When I found the excelsior in the attic, I took it into the factory. This is the same excelsior I took in the factory. I was not able to offer it before because I must have got the boxes mixed. I took a sample of excelsior out to show customers, and this is evidently a box I was taking out to show customers, and it got mixed. Defendant's Exhibit EE admitted in evidence.

(Testimony of Claude C. Rafter.)

Cross Examination.

I found a couple handfuls of that excelsior in a wooden box 8x20 inches. The excelsior that I found in the wooden box in the attic was about twice the amount that is in the box marked Defendant's Exhibit 5.

Q. Now, in Seattle, in your deposition, you testified that you and the defendant Hedrick went back to the factory and looked for old excelsior, didn't you?

A. We did, yes.

Q. Where did you look when you went back there?

A. Well we looked where I thought we had put it.

Q. Where was that?

A. That was in the factory?

Q. Where in the factory?

A. In the front part of the building, and back part.

Q. Had you removed the other excelsior out of the box?

A. What excelsior out of the box?

Q. The old excelsior you found in the box with some glass in?

A. Yes. [214]

Q. When did you remove it from that box?

A. I removed it the day before I brought it up to the attorney.

Q. When did you bring it up to the attorney?

A. The morning of the trial.

Q. The morning of the taking of the depositions in Seattle?

A. Yes.

Q. And your recollection then was that you had put that excelsior in the box that is marked "5"?

A. Yes.

Q. And you produced that in court, and said it was the excelsior; then you and Mr. Hedrick went back and looked. Now tell me exactly where you looked when you went to find that excelsior?

(Testimony of Claude C. Rafter.)

A. Well we looked all over the factory to find another box, but we didn't find it.

Q. Did you put that excelsior under those gunny sacks yourself?

A. No, sir, I did not.

Q. How do you know that was the same excelsior that was in the box?

A. Well, I recognized it as the excelsior that I got out of the wooden box.

Q. What is there about that excelsior that made you recognize it?

A. Well, just the looks of it.

Q. Just the general appearance?

A. Well it had an old appearance.

Q. That general appearance of being old?

A. Yes.

Q. That is all? That is the only way you are able to identify that excelsior as coming out of that box?

A. About the only way you could identify it.

Q. And that is the only way you do identify it?

A. Well, I handled it when I took it out of the wooden box. And I handled it when it was in the paper box.

Q. But you didn't put it under the gunny sack?

A. No, I laid it on top of some bales, evidently, like I lay this [215] now, and picked up the wrong box, is what I done, as near as I can figure.

Q. And the first time you had taken up the box about that size, about the size of Exhibit 5, you had taken that much excelsior out of the wooden box?

A. Just about.

Q. You never found it again?

(Testimony of Claude C. Rafter.)

A. I have got all the excelsior I found, it is in that envelope.

Q. Doesn't the excelsior in box marked Exhibit 5, look old?

A. No—some of it does, yes.

Q. Some of it does?

A. Yes.

Q. When was the excelsior in box marked Exhibit No. 5, put in there?

A. This is exhibit 5, here?

Q. Yes.

A. I think that was put in there the day before the deposition was taken.

Q. Where was it put in?

A. In the factory.

Q. Did you remove this box with the glass, with the old excelsior in it, from the garage to the factory?

A. I did when I found the glass. I cut up the glass for a friend of mine.

Q. When did you do that?

A. The day before.

Q. The day before what?

A. The day before the deposition was taken in Seattle.

Q. You took the box with the old excelsior, from the garage, and put it in your factory. Who helped you do that?

A. Nobody.

Q. How large is that box?

A. The box is eight by eighteen or twenty; I don't know just exactly. [216]

Q. Eight inches?

A. Eight inches, yes.

Q. By about twenty inches?

A. About.

(Testimony of Claude C. Rafter.)

Q. How much glass was there in the box?

A. Four pieces.

Q. What size?

A. Well it would fit the top of the box.

Q. The glass was then about eight by eighteen inches?

A. Eighteen or twenty, somewhere around there.

Q. Were four pieces of glass in there?

A. Yes, sir.

Q. Was the box filled? How deep was the box?

A. About four inches high.

Q. The box was filled with glass or excelsior?

A. Yes.

Q. And you took that box from the garage and took it over to the factory?

A. Yes; it is only next door.

Q. And when you got to the factory what did you do with it?

A. I left it with the wooden box until I cut up the glass.

Q. How long did you have it there before you cut up the glass?

A. Just a short time.

Q. When you cut up the glass what did you do with the excelsior that was in the wooden box?

A. Put in pasteboard box about the size of the pasteboard box that is in evidence here.

Q. Marked Defendant's Exhibit 5?

A. Just about, yes.

Q. When you brought this—in Seattle, when we took the deposition, you honestly believed that that was the excelsior which you had found in the wooden box? [217]

A. Yes; in a hurry I grabbed it up and took it down.

Q. And now the only excelsior that you found after that was the handful which you found under the sacks?

(Testimony of Claude C. Rafter.)

A. Well no, it was in a box, a box similar to this one.

Q. It was in a box similar to this one. You didn't bring the box down?

A. No, I didn't bring the box.

Q. Now then you had—according to your testimony you had filled that box of excelsior and you found the box under the sacks with a handful of excelsior in it, the handful that you have offered in evidence marked Defendant's Exhibit EE?

A. No, it is more than a handful. I have got it in my pocket, my overcoat pocket.

Q. You have, have some more?

A. Oh yes.

Q. Why don't you produce it?

A. I thought it was necessary to produce that.

Q. I want all the excelsior that you found in that box that you claim was made in 1923. I want it produced in court.

A. Well you will get it. I would like to explain to the Court that this glass was put in cornerwise of the box, and this excelsior was put in there, just tucked in the corner, that is the way it was.

Q. Now what did you do with the excelsior after you found it yesterday? When you found the excelsior under the sack, what did you do with it?

A. Why I looked it over thoroughly.

Q. Thoroughly?

A. Thoroughly.

Q. Excelsior marked Exhibit "FF" for identification.

Q. You examined it strip by strip?

A. I did.

Q. And looked for dates on it?

A. Why sure. [218]

(Testimony of Claude C. Rafter.)

Q. Did you find any date?

A. I did.

Q. What dates did you find?

A. October 28, 1923, Sunday Edition.

Q. Is that strip that you discovered, October 28, 1923, is that in evidence here?

A. It is in that little envelope there.

Q. Which envelope?

A. The little one that I produced.

Q. Did you select for the little envelope any other strip that bore an earlier date?

A. No I did not.

Q. You only discovered one strip of excelsior that was dated as early as that, as October 23, 1923?

A. Well, there were some other numbers on there, but I couldn't make them out clear, so I didn't go any further. There may be some more there, but I found that, anyway, and put it in this little envelope.

Q. In the little envelope?

A. Yes.

Q. That is the envelope marked "EE"?

A. That is it.

Q. Now where did you get the excelsior that is in the box marked Defendant's Exhibit "D"—deposition Exhibit 5, for identification?

A. Why I suppose I got it out of my regular stock of excelsior, to show to my customers.

Q. You identified that as contained in the box marked Defendant's Exhibit 5, as being from your regular stock?

A. I suppose it is.

Q. Did you have any—in your regular stock did you have any old paper?

(Testimony of Claude C. Rafter.)

A. No; cutting up over-issues, buying them from the Times; wouldn't be very many old, not very old; would be some. [219]

Q. How old would they be?

A. Oh probably some of them would be six months.

Q. That would be the oldest?

A. Oh I don't know.

Q. You don't know about that?

A. No, hard to tell.

Q. Do you know how old the issues might have been that you found in this box?

A. Oh they might have been—they might have been new, they might have been cut up that day; they might have been cut up a month. It is pretty hard to tell that.

Q. Now you say you found a strip in there that was dated in 1923?

A. Yes.

Q. That might have been six months old.

A. Could have been, yes.

Q. Or two years old?

A. No.

Q. Couldn't have been two years?

A. Because I wasn't in Seattle that long.

Q. What?

A. I wasn't in Seattle that long.

Q. But the excelsior marked Exhibit 5, that could have been from old newspapers?

A. Could have been, but it isn't.

Q. It isn't. How old were the newspapers that that was cut from?

A. Well I don't know, I haven't looked it up; you looked it up.

Q. Well you manufactured it, didn't you?

A. Yes.

(Testimony of Claude C. Rafter.)

Q. Took it from your regular stock?

A. Yes.

Q. Can't you give us some idea how old the oldest papers were that you were using in your regular stock?

A. Well, buying newspapers from the newspaper office, I would buy what [220] they would give me, and I wouldn't stop to read the dates on any of them.

Q. How is that answer?

A. I was buying papers from the newspaper office, and I wouldn't stop to read the dates on any of them, because I don't cut the paper myself, my daughter cuts it, and I do the baling and delivering.

Q. How often do you buy newspapers?

A. Every time I need it.

Q. How often do you need it?

A. Probably once a day, or probably once a week.

Q. What issues do you buy?

A. What issues?

Q. Yes.

A. Buy whatever they have.

Q. From what paper?

A. The Times.

Q. Do you buy from the P. I. too?

A. No, I don't buy any from the P. I.

Q. Recently you have bought all your paper from The Times?

A. Not all of them, no.

Q. From whom else do you buy?

A. I buy from the apartment houses, and get five hundred pounds, or half a ton I may get.

Q. From the apartment houses. How long have you been doing that?

A. Ever since I started.

(Testimony of Claude C. Rafter.)

Q. Ever since you started. Now when, do you say again, you found this old excelsior in the wooden box which had the glass in it?

A. It was the day before we took the depositions.

Q. How did you happen to find it?

A. Well, a friend of mine wanted some glass for a book-case, and I looked all over the shop for some glass, and I couldn't find any, so I went up into this attic.

Q. How do you fix the day when you found it? [221]

A. Well I remember going down to the court proceedings the next day.

Q. Do you remember what date we took the depositions?

A. No I don't right now.

Q. I think it was on the 6th and 7th of April this year, last month. Then you would have found the excelsior about the 4th or 5th of April, 1933?

A. If that was the date we took the depositions. If——

Q. If that was the date. Now you are sure about that?

A. Yes, I am sure.

Q. Now in the deposition you testified, in answer to the question: "How did you come into possession of this excelsior which is contained in the box which I will mark as Defendant's No. 5 for identification? How did you come into possession of that excelsior?" Your answer was: "Well before I went into the excelsior business I was in the confectionery business and I handled 'Circle' cookies made by the Circle Packing Company, and they came in a box about two feet long and about eight or nine inches wide, and when we sold them in stores you took the cover and took it off and put it under the box. Some stores objected to it because you got the cookies quite dusty, so I had some wooden boxes made with a slot in the top of them so I

(Testimony of Claude C. Rafter.)

could slide a glass in. When I went into the excelsior business entirely, exclusively, I had a few of these boxes and I stored them up in the attic in the garage—not in the attic of the garage, but over the side of the garage up over the store roof, under the store roof. I put the glass in this wooden box and put the excelsior in here to pack it, and in the neighborhood of a month or six weeks ago I was up in there looking for something, and I found this.” That is what you testified to in your deposition. Now you say that you found it the day before we took the deposition. How do you reconcile the two statements?

A. I don’t know.

Q. How do you reconcile the statement that you describe the box here as being eight or nine inches wide, and two feet long? [222]

A. Well about that; I didn’t measure it.

Q. Now if a box was about two feet long instead of eighteen inches it would have contained a great deal more excelsior, wouldn’t it?

A. Oh there was room for more excelsior than was in there when I was packing the box and glass away and putting some excelsior in there, just to be putting it in. We thought some time that probably we could sell paper excelsior to glass manufacturers, instead of hay.

Q. Who was present when you made the minute examination of the excelsior?

A. What excelsior?

Q. Of the excelsior that you have produced here and offered in evidence.

A. Who was present? There wasn’t anybody present.

Q. You were by yourself?

A. Yes.

(Testimony of Claude C. Rafter.)

Q. Where did you make that examination?

A. The excelsior that I got out of the garage?

Q. Yes, and that you have offered in evidence here.

A. Nobody.

Q. Where did you make it?

A. In my factory.

Q. In your factory?

A. Yes.

Q. But you don't know who took it out of the box where the glass was in—you took it out of the box where the glass was in, and put it in a box of that kind?

A. Yes.

Q. And you brought Exhibit No. 5 into court, and thought that was the box?

A. Yes, that is exactly what done.

Q. Now then you found it in a box just like that under some gunny sacks? [223]

A. I did.

Q. You didn't bring the box along?

A. No I didn't.

Q. But you examined each strip of excelsior to find the dates on it?

A. You bet I did.

Q. You didn't want to be caught a second time?

A. I don't know as I got caught the first time.

LOUIE J. ANTONSEN,

plaintiff, called in rebuttal.

I visited the old excelsior plant on Xavier Street with Mr. Pierce and Mr. Smith Monday night. I have the excelsior here that I brought back, marked Plaintiff's Exhibit 24. In examining

(Testimony of Louie J. Antonsen.)

it I found some dates. That was in the presence of Mr. Pierce, Mr. Smith and Mr. Winter. I did the examining. In picking certain sections and putting them together like a jigsaw puzzle, I found some dates. Six strips gave me the name, or part of the day and month. I pasted those six strips on a piece of paper, which was introduced, marked Plaintiff's Exhibit 25.

It was stipulated between the parties that Plaintiff's Exhibit 25 was admitted to have appeared in the Saturday Journal edition of Portland, Oregon, under date of June 13, 1925, Plaintiff's Exhibit 26 being the original Journal file and this stipulation being entered into to permit the Journal file to be taken back to the newspaper office.

Cross Examination.

I found other strips of paper which could be put together similar to Exhibit 25, showing date of May, 1925. I turned those over to Mr. Winter when I found them. It shows a date in May, 1925.

ROY D. SMITH,

called as a witness for the Plaintiff in rebuttal.

I have lived in Portland two years. Am employed by Antonsen in charge of the business in this territory, selling excelsior and boxes. I visited the place on Savier Street Monday evening with Mr. Antonsen and Mr. Pierce shortly after Court adjourned, looking [224] through the side partitions of the front windows. They were boarded up part way with very thin boards. Mr. Antonsen and Mr. Pierce pulled down bunches of excelsior from between the windows, up close to what would be level with the top of the window. Mr. Pierce took some loose strands from his bunch and found some marked 1925. Then the excelsior was taken to Mr. Winter's office. Then we started going through the

(Testimony of Roy D. Smith.)

bunches of excelsior for possible identification, and I noticed this one you have just handed me, that pertained to some bond issue around Wenatchee. And it looked like one that could be easily identified. I gave it to you, Mr. Winter.

Statement of counsel for Plaintiff: The reason that particular strip is being offered in evidence is that it is about a meeting called for Monday, May 11th, and the Court's attention is called to the fact that Monday, May 11th would fall either in 1925, 1931 or 1919, the Court taking judicial notice of the calendar and the court will take judicial notice that May 11th could not have been in 1923, or 1924. The strip was marked Plaintiff's Exhibit 27 admitted in evidence.

Cross Examination.

I went over this excelsior strand by strand, and we have produced any dates that we could possibly find. We found no other dates than the ones produced here.

GEORGE F. McDOUGALL,

recalled on behalf of Plaintiff in rebuttal.

Mr. WINTER: At this time, if the Court please, we desire to offer in evidence certified copy of the file wrapper in the Rafter application for patent.

COURT: That is just a substitution?

Mr. WINTER: No, we have offered a copy of the file wrapper in the Antonsen case, but this is the Rafter application. The question is, whether properly certified.

Mr. FENLASON: I make no objection to the certification. It appears to be regular. [225]

Marked Plaintiff's Exhibit 28.

Questions by Mr. WINTER:

I hand you Plaintiff's Exhibit 29, for identification, and you may state what that is.

(Testimony of George F. McDougall.)

A. That is a photographic enlargement of drawings in the Rafter abandoned file, and the photostat was made from drawing that is in the file wrapper and contents of the abandoned wrapper files, an enlargement of the original drawing.

Mr. WINTER: I would like to offer that in evidence.

Marked Plaintiff's Exhibit 29.

Q. Now you have examined the file wrapper in the Rafter application?

A. Very carefully, yes.

Q. Can you tell the Court what the object of Mr. Rafter's invention was?

A. I can read that.

Q. Handing you Exhibit 28, the file wrapper?

A. The original specification says: "The invention is a machine for cutting paper or the like into shreds in which the cutting knives are constructed and held so that they may be placed very close together and also so that they will release when too much paper is passing through. The object of the invention is to provide a machine that will cut paper into very fine shreds. Another object of the invention is to provide knives for a paper cutting machine which may be arranged on two spindles so that their cutting edges may be positively held together at all times."

Q. Have you read the specifications?

A. I have read the specifications and various actions of the attorney and the examiner, very carefully.

Q. Now what kind of machine—point out on Exhibit 29 what kind of machine Rafter specified in his application for a patent?

A. After stating the object, he says: "With these ends in view the invention embodies a pair of spindles,"—these are found here—"rotably held in a suitable frame,"—as indicated—"with

(Testimony of George F. McDougall.)

a pulley [226] on the end of one of the spindles," that is pulley marked "11"—"and a flywheel on the other." This is shown over here marked by the numeral "10". "Each of the spindles are provided with a gear so that they will rotate together, and circular knives with beveled cutting edges are held on the spindles with suitable locknuts." Those locknuts are shown on one end, that is the left end, as you have the drawing. "One of the spindles is provided with a spring which will permit it to move in such a position that the knives on it will move away from the cutting edges of the knives on the other; and the other spindle is provided with sprockets through which conveyors for feeding material to the knives and for taking it away from the knives may be driven. Other features and advantages of the invention will be seen from the following description taken in connection with the drawings." And then follows the detailed description of the drawing. It is perhaps not necessary to read that.

Q. No. What I was going to say, does the description say anything about whether the knives are kept in contact?

A. It is emphasized repeatedly in the original specifications. It is found and very positively stated, and it is emphasized repeatedly in the argument sent up to the examiner.

Q. That all appears in the wrapper?

A. That all appears.

Q. There are numerous claims there that were abandoned and new claims substituted?

A. Yes.

Q. Will you take the last claim and read it on the exhibit?

A. The last claim. The others have been voluntarily cancelled on rejection by the examiner; Claim 6 being the last claim, says: "In a device of the character described, a plurality of independent cutting discs;" that would indicate these cutting discs

(Testimony of George F. McDougall.)

—“each disc sharpened on a bevel forming a toe or cutting edge.” That is the way these are sharpened here. “At one edge, and at heel at the other [227] edge.” That of course refers to the beveled shaped knife in the cross-section,—“which is of considerable smaller diameter than that of the toe.” That language is merely another way of describing an acute beveled angle. “Shafts upon which the said discs are mounted.”—These shafts are found here and here.—“The discs on each shaft being rigidly mounted to form a unit with each disc removable and the cutting edges of the discs opposite to, engaging, and overlapping the cutting edges of the discs in the other group on the other shaft.”—That is the precise construction shown on the left hand end of the drawing where the rolls contain the discs, the section. “Means for rotably mounting the said shafts one above the other.”—That would include these four ball-bearings, or their equivalent.—“Adjustable means for rigidly holding one group of cutters in relation to the other.” That would include the frame—“and means for resiliently holding the cutting edges of the cutters of one group against the cutting edges of the cutters of the opposite group.” That refers to this spring means shown for the purpose, and it shows, as I have explained in my direct testimony, that spring urging the upper shaft towards the left, which is the same position we find the spring in defendant’s device; brings the whole group or urges the whole group towards the left; if one or more of these discs are in contact then the spring reacts against the point of contact.

Q. Yesterday when Mr. Givenan was on the stand he, as I recall it, testified that if these discs were operated so they were in contact they would soon wear. What about that?

A. He is mistaken about that; I think I covered that fully in direct. That is a well known construction called friction gearing.

(Testimony of George F. McDougall.)

Q. When we examined the Hedrick machine were there any of these discs that were in contact?

A. There were.

Q. How many?

A. There were two that I am sure of, and I am not certain about [228] the third pair.

Q. Those two were on the side opposite to where the spring is?

A. They were.

Mr. FENLASON: That has all been gone into.

Q. Did you notice whether or not those discs where they were in contact—whether they were worn?

A. They were not worn to amount to anything.

Q. You were present when we examined the building where the old excelsior was found?

A. Yes.

Q. Did you see Mr. Wheeler there?

A. I did.

Q. Did you hear Mr. Wheeler on that occasion make the statement that the excelsior was placed in there either in the fall of 1924 or 1925, something to that effect; make such a statement in your presence, and in the presence of Mr. Pierce?

A. I heard Mr. Wheeler make the statement; I reached up and pulled out an old newspaper in the presence of Mr. Pierce and Mr. Wheeler, and as I pulled the newspaper down both Mr. Pierce and I discovered that it had a date on it late in 1925. Mr. Wheeler then remarked that it may have been 1925 when he put it up, or words to that effect.

Mr. FENLASON: Your Honor, I have not had an opportunity to examine this file wrapper. It is now about twelve o'clock, and I am not familiar with Your Honor's rules here. I wondered if it would be permissible for us to examine the file

(Testimony of George F. McDougall.)

wrapper during the noon hour, that relates here to the Rafter machine.

Mr. WINTER: No objection.

Recess until two o'clock.

Cross Examination.

Questions by Mr. FENLASON:

Did you make an examination of the file wrapper here which has been introduced in evidence, on the Rafter patent? [229]

A. Yes, a very careful one.

Q. Did you make an examination of the various citations which were cited by the examiners?

A. The patents cited by the examiners, no, I did not.

Q. You didn't examine them?

A. They were not available.

Q. Did you examine the patents cited in the Antonsen patent?

A. I have examined, I think, most of them.

Q. Now in this application here you noticed the citation, did you, against that of the Baker patent—I mean the Taylor patent and the Hemje patent?

A. I remember those names; yes, I remember those were cited against certain claims that we offered.

Q. I will hand you defendant's Exhibit GG for identification, and will ask you to state if you know what that is.

A. That is apparently a printed copy of patent No. 286503 issued to one C. F. Taylor under date of October 9, 1883.

Q. I will ask you to examine the sheets there setting out the drawings, and I will ask you to state if it does not show a plurality of beveled discs mounted upon upper and lower spindles with spaced relation between the cutting edges of the discs.

Mr. WINTER: What is the purpose of this testimony?

(Testimony of George F. McDougall.)

This is not pleaded as a defense, and I don't think it is cross examination.

Mr. FENLASON: They introduced the file wrapper here and the witness said that he had made a very thorough examination of that, and they also introduced the file wrapper of their own patent, and when they do that volutnarily I think we are entitled to go into the things which are disclosed by these documents. In other words, they have voluntarily placed that evidence before the court, and I think we will be entitled to show to the court what those things consist of. I believe that is correct. On direct examination here, as rebuttal, witness testified that he had examined this [230] file wrapper and had made a very careful examination of it; not only that, but in the other file wrapper you will find a statement of the examiner to the effect that the mere separation of a plurality of discs upon spindles does not constitute invention. Now my object in showing this, Your Honor, it is related directly in the file wrapper, the file wrapper of the Rafter patent, Plaintiff's Exhibit 28, and in this file is cited the particular patent to which reference has been called. I will show here that in the art back as early as 1883, we had machines where the plurality of discs mounted upon spindles oppositely rotating were fixedly mounted with a spaced relationship between the cutting edges of the discs. That is the purpose, and I think perfectly proper under cross examination, in view of the fact that they voluntarily injected this themselves.

COURT: As I understand it, the testimony with reference to the file wrapper was not on the question of anticipation at all, but on the question of how this machine operated; I think that is not within the scope of cross examination, although if you wish to make the file wrapper complete I think you might introduce the patents you refer to.

(Testimony of George F. McDougall.)

Mr. FENLASON: May I have the privilege of introducing the patents to which reference is made?

COURT: Yes.

Mr. WINTER: I am not objecting because those are copies from the Patent Office.

Mr. FENLASON: I will introduce that patent then.

Marked Defendant's Exhibit GG.

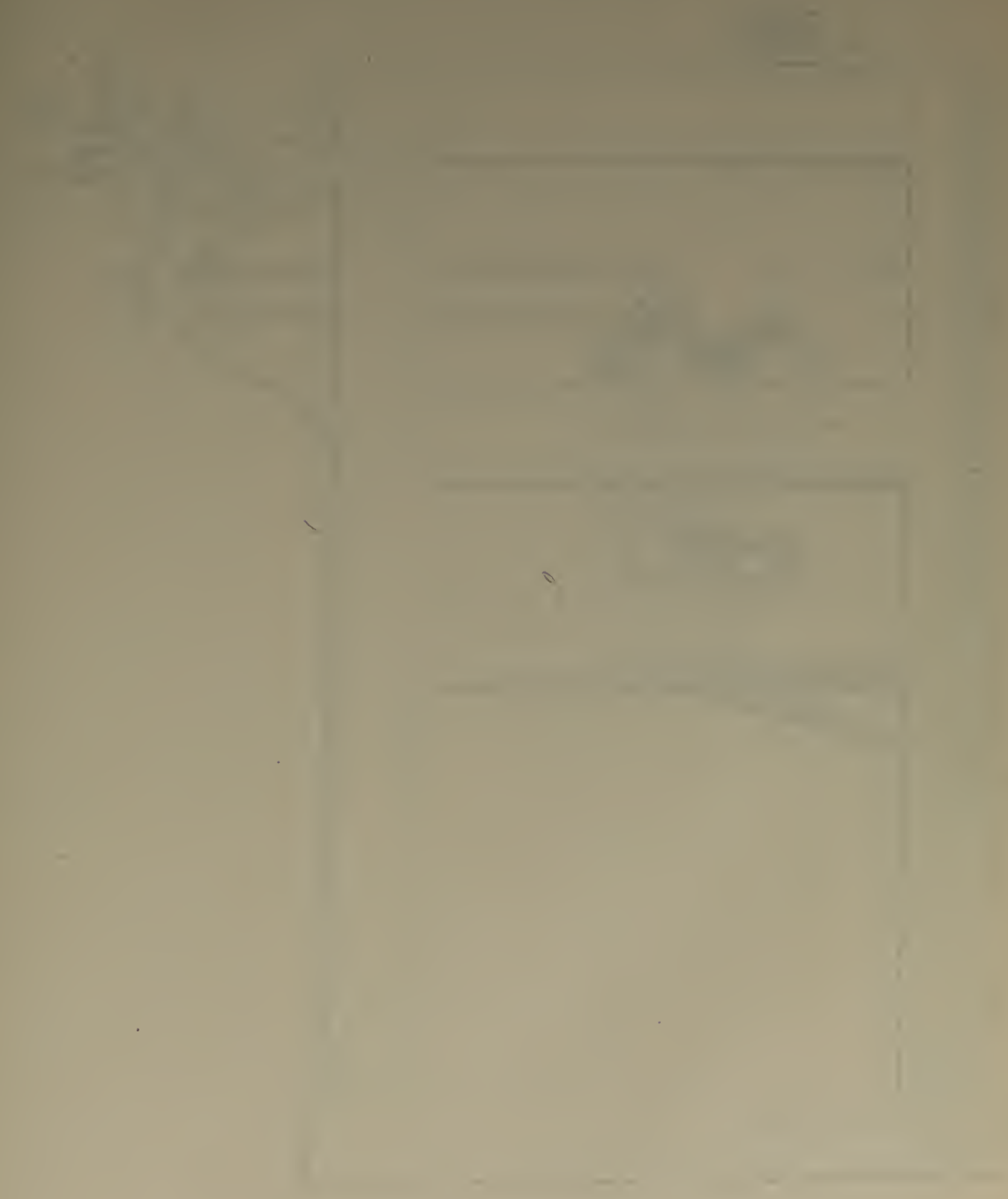
Mr. FENLASON: I will introduce the Hemje patent.

Marked Defendant's Exhibit HH.

Mr. FENLASON: I also introduce the Burkhardt patent.

Marked Defendant's Exhibit II.

DEFENDANT'S EXHIBIT GG

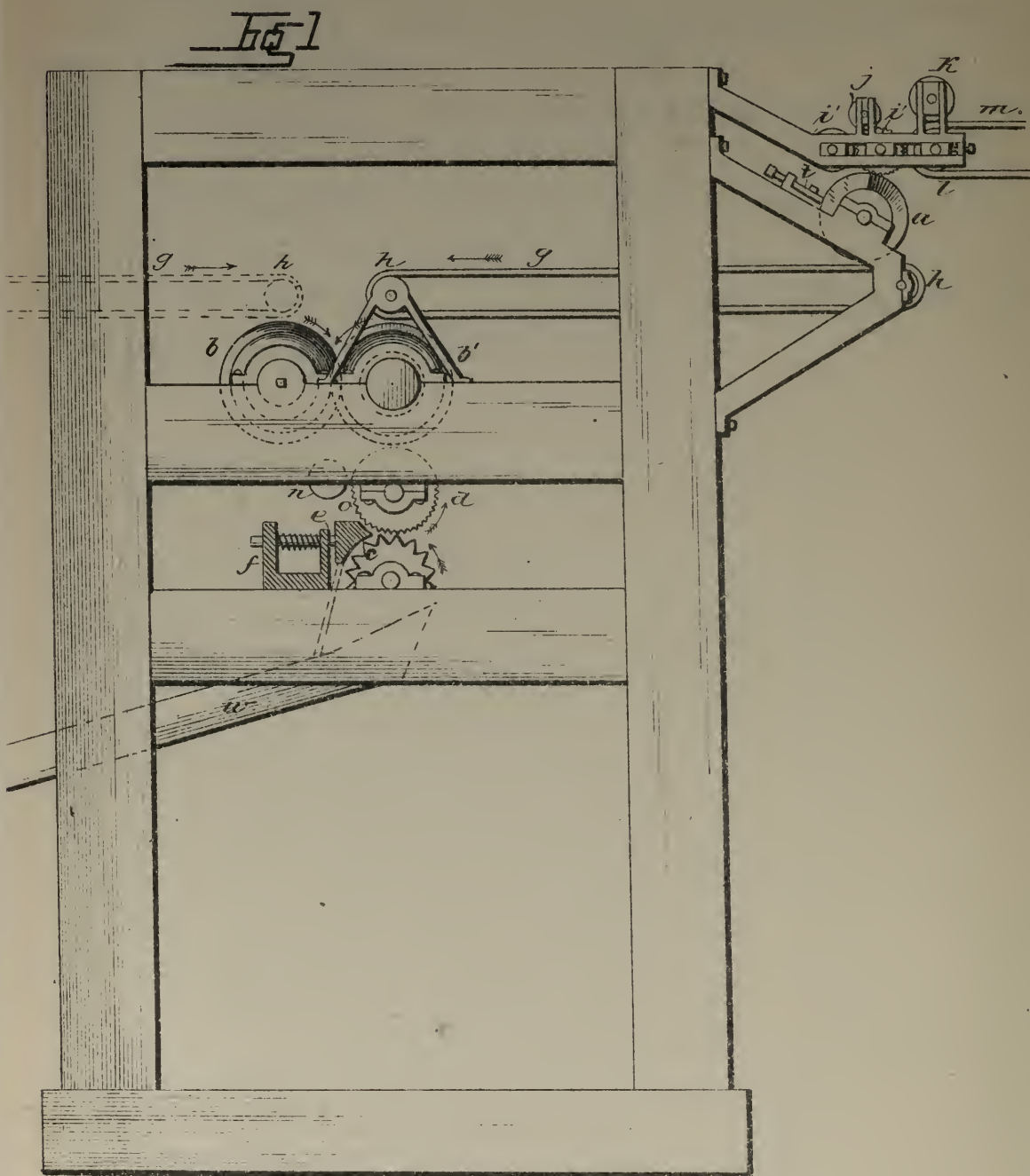


C. F. TAYLOR.

PROCESS OF AND APPARATUS FOR TREATING RAGS FOR PAPER STOCK.

No. 286,503.

Patented Oct. 9, 1883.



WITNESSES:

Ed. S. Dietrich,
P. Brunker.

INVENTOR.

Charles F. Taylor
By Allen McArthur

ATTORNEY.

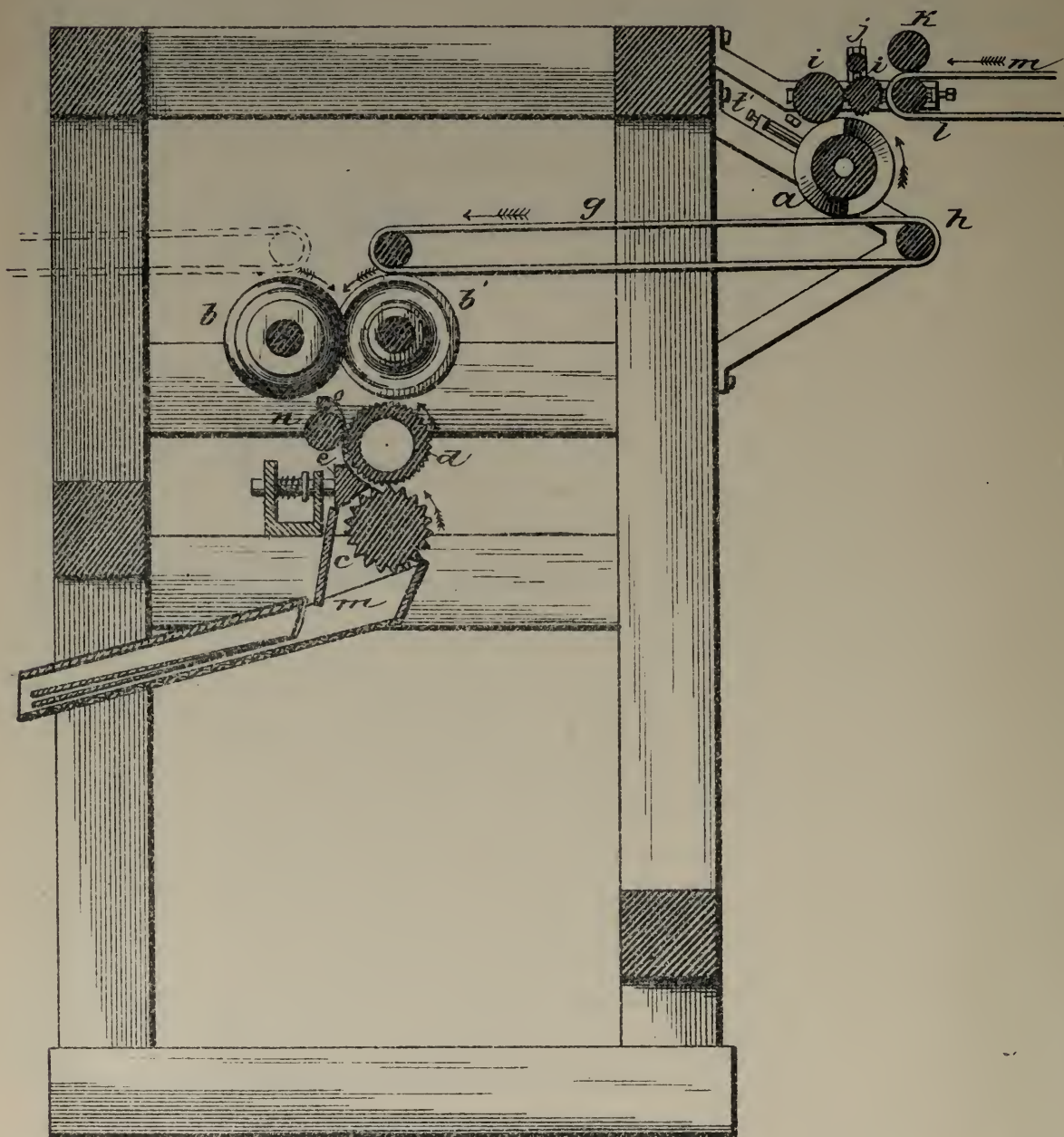
C. F. TAYLOR.

PROCESS OF AND APPARATUS FOR TREATING RAGS FOR PAPER STOCK.

No. 286,503.

Patented Oct. 9, 1883.

Fig 2



WITNESSES:

Fred. G. Dieterich
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INVENTOR.

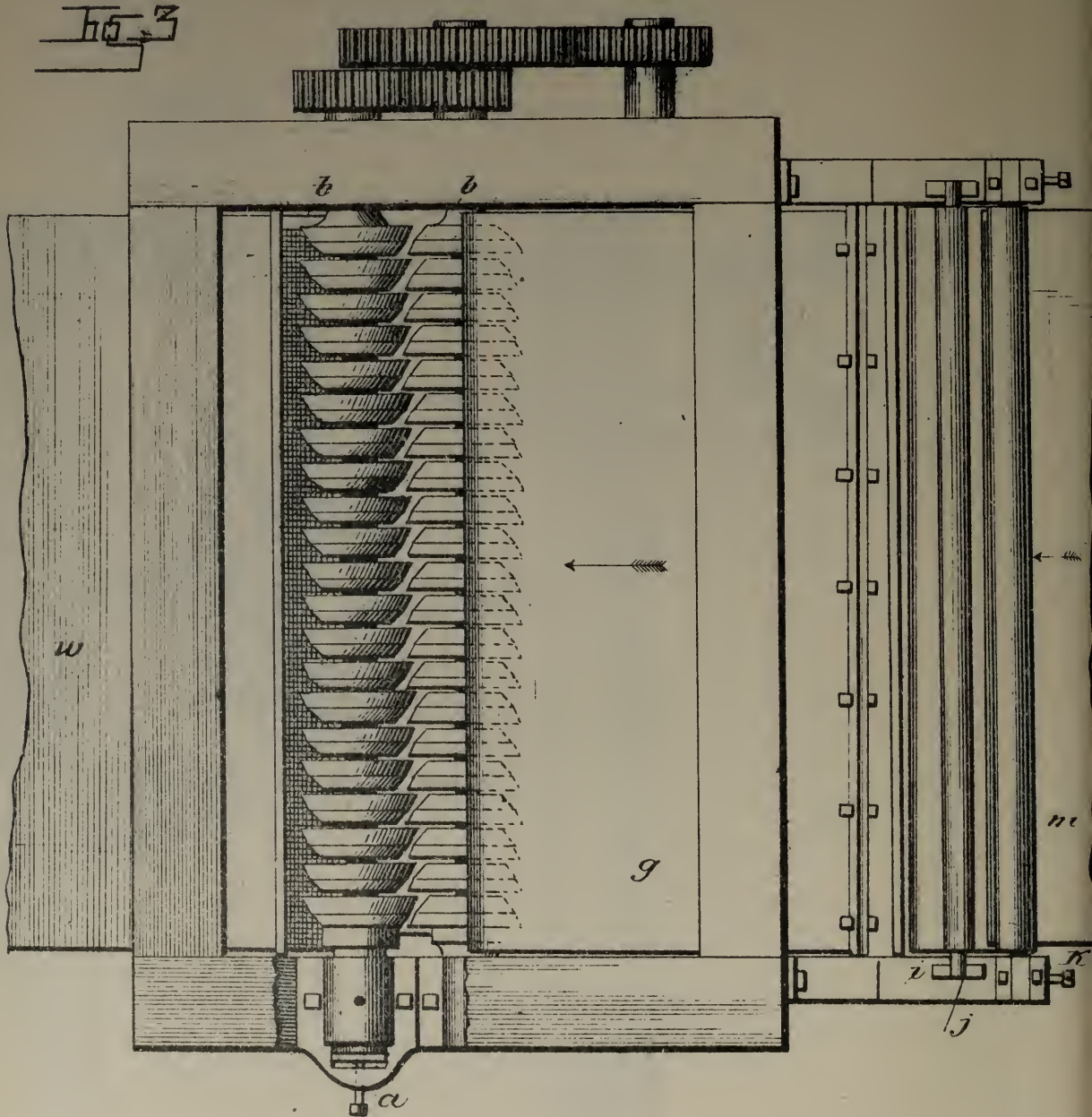
Charles F. Taylor
By Allen Webster
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C. F. TAYLOR.

PROCESS OF AND APPARATUS FOR TREATING RAGS FOR PAPER STOCK.

No. 286,503.

Patented Oct. 9, 1883.



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Patented Oct. 9, 1883.

Fig. 4.



Fig. 5.

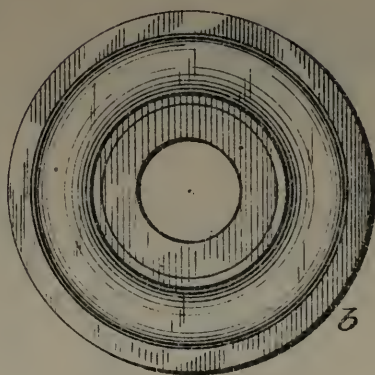


Fig. 6.



Fig. 7.

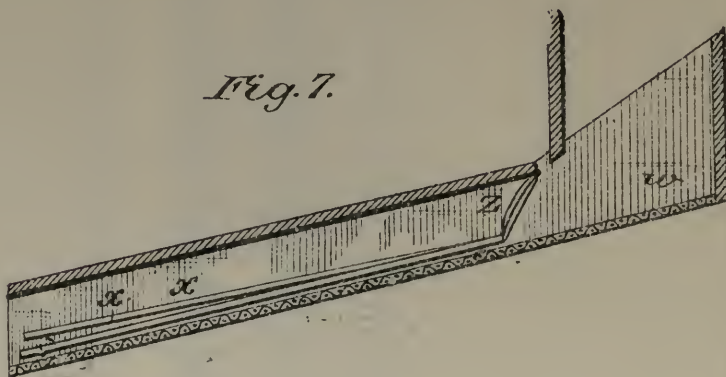
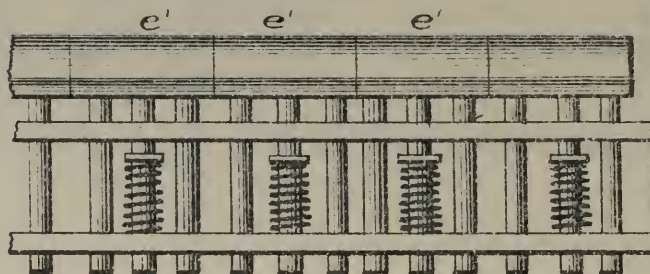


Fig. 8.



WITNESSES:

Ad. H. Dieterich,
L. P. Bruner.

INVENTOR.

Charles F. Taylor
By Allen Webster
 ATTORNEY.

C. F. TAYLOR.

PROCESS OF AND APPARATUS FOR TREATING RAGS FOR PAPER STOCK.

No. 286,503.

Patented Oct. 9, 1883.

Fig. 9.

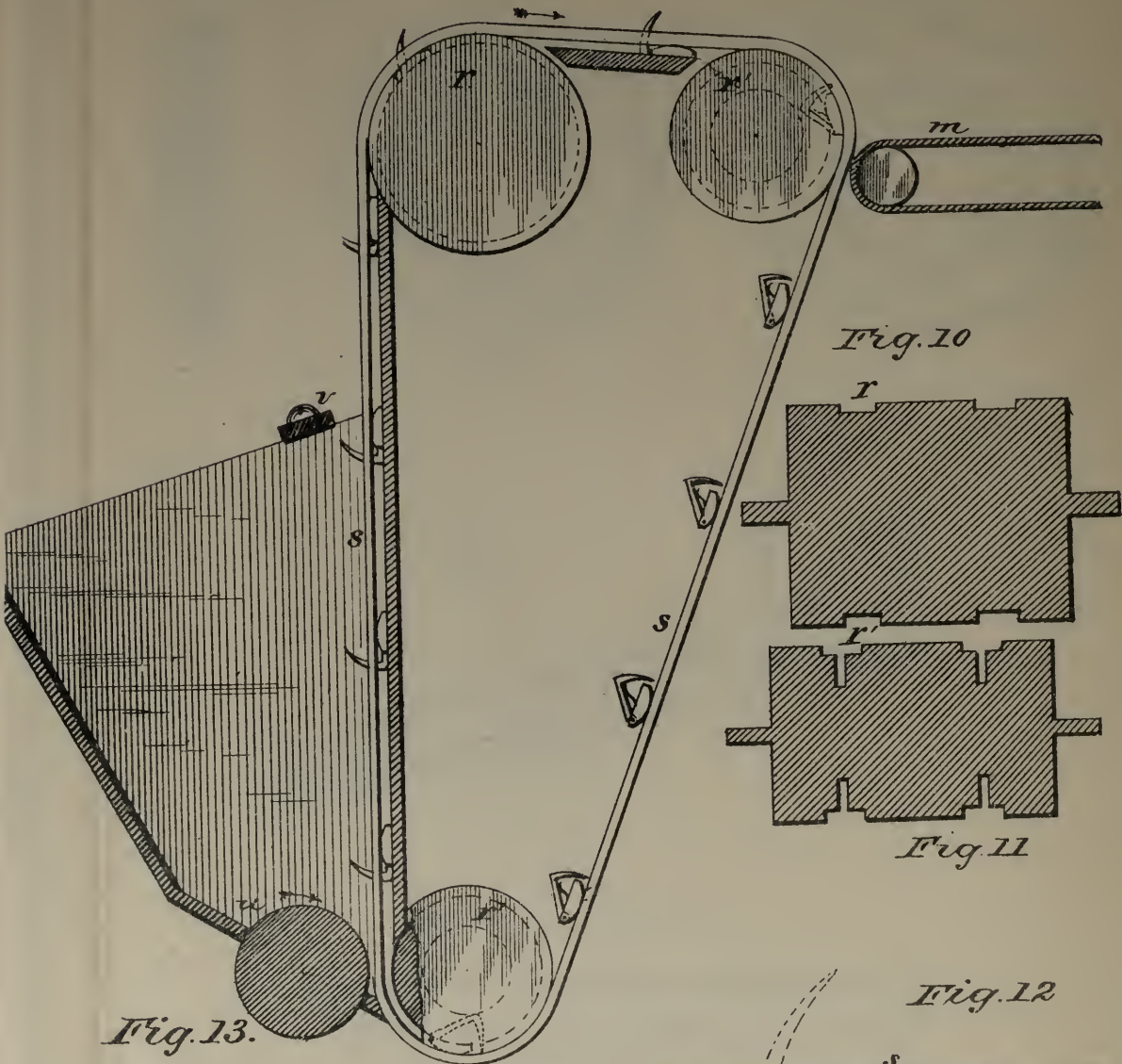


Fig. 10

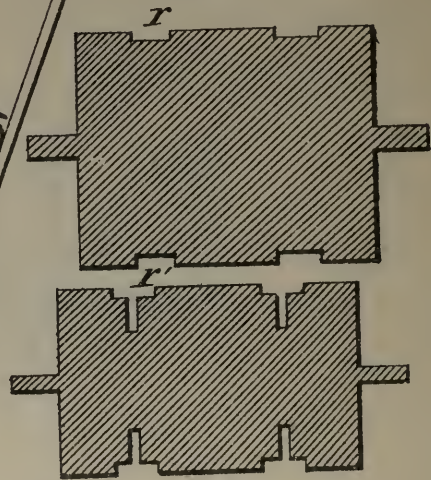


Fig. 11

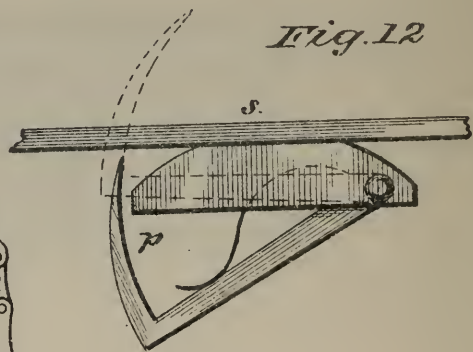
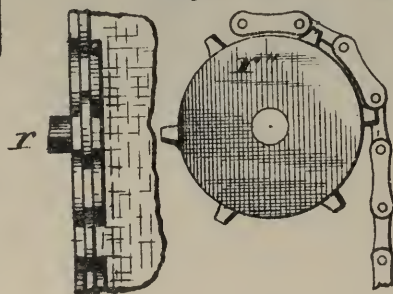


Fig. 13.



Fig. 14.



WITNESSES:

Ed. S. Dietrich.
L. P. Brunker.

INVENTOR.

Charles F. Taylor
By Allen Webster

ATTORNEY.

UNITED STATES PATENT OFFICE.

CHARLES F. TAYLOR, OF SPRINGFIELD, MASSACHUSETTS.

PROCESS OF AND APPARATUS FOR TREATING RAGS FOR PAPER-STOCK.

SPECIFICATION forming part of Letters Patent No. 286,503, dated October 9, 1883

Application filed March 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. TAYLOR, of Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Processes of and Apparatus for Feeding, Cutting, Dressing, Cleaning, and Treating Rags for Paper Manufacture, of which the following is a specification.

Heretofore rags for paper stock have been stripped—*i. e.*, cut or torn into strips—by hand. This method of stripping is objectionable, because slow and expensive. Cross-cutting—*i. e.*, cutting the strips into small pieces—has heretofore been accomplished both by hand and by machinery, the cross-cutting for the finer grades of paper being done by hand and for the coarser grades by machinery. The machinery heretofore used, however, has not been adapted to cut the materials with a sufficient degree of regularity, and after being cut the stock has not been reduced to the uniform size which is most desirable in the various manipulations to which it is afterward subjected, and the present construction of these cross-cutting machines is such that, however carefully they may be operated, a product of uniform size cannot be obtained therefrom. Attempts have been made to strip and cross-cut without an intermediate handling by connecting two machines. With this arrangement, however, it has been necessary to reduce the rags first by hand to a size adapted for the machine, and no positive means of conveying the strips from one cutter to the other has been provided; but the material has been deposited upon an apron, and conveyed by it to a chute through which they pass, and are deposited upon a second apron, which conveys them to the second cutter. The manner in which the rags are thus presented to the second cutter depends upon chance, and they are as liable to be cut in one direction as another. This defect is found in every machine heretofore made—*i. e.*, it has been necessary to first prepare the rags by hand cutting or stripping for the machine, and the feed has not been positive and has not been within the control of the operator, either as to the manner of presenting the ma-

terial to the cutting device, or as to regulating the size to which the material is cut.

The object of my invention is to provide means for and a method of stripping rags by machinery; and, further, to obtain, by machinery, a product of a uniform or approximately uniform size; and, further, to provide a machine which shall both strip and cross-cut the stock at one operation—that is to say, with but one handling; and, further, to provide a means of removing foreign matter from the rags at the same handling as when cut; and, further, to accomplish the results desired, as hereinafter set out.

My invention consists in the method or process of treating the rags whereby the desired result is attained, and in the steps requisite to perform the several operations.

It further consists in the feeding mechanism.

It further consists in the means adapted to produce the desired result; and, further, consists in the construction and arrangement of the parts whereby the objects of my invention are attained.

In the accompanying drawings, in which similar letters of reference indicate like parts, a machine is illustrated which is adapted to perform the several operations.

Figure 1 is a side view of the machine with the pulleys and gears removed, disclosing the portions of the machine which operate upon the rags. Fig. 2 is a sectional view of the same. Fig. 3 is a plan or top view. Figs. 4, 5, and 6 are detail views of the rotary cutters. Fig. 7 is a sectional view of the sieve. Fig. 8 is a top view of the sectional beater-bars. Fig. 9 is a side view of the feeding device, with parts in section, and Figs. 10, 11, 12, 13, and 14 are detail views of the parts of the feeding device. *i i* represent pressure-rolls, which are also adapted to act as feed-rolls.

a represents a revolving blade, adapted to cut the rags in strips. *b b* represent rotary cutters or shears in gangs, adapted to make shearing cut. *c* represents a beater adapted to beat or pound the material against the beater-bar *e* as it is fed to it by the feed-roll *d*.

The operation of the machine will be readily understood on referring to the drawings. The

being fed upon the apron *m* are carried in the direction indicated by the arrow, and are cut by the pressure-rolls *i*, which are adapted to crush any hard substance. These rolls also serve as feed-rolls, holding and feeding the material to the cutter *a*, which, revolving as indicated, carries the material against the fixed roller *t*, thus separating the rags into narrow strips. This operation is termed "stripping." It will readily be seen that by changing the position of the knives—*i. e.* placing the cutters ahead of the cutters *a*—the stripping will be accomplished by these cutters and the cross-cutting by the cutter *a*. After being cut in strips the rags fall to the apron *f*, which, moving in the direction indicated, carries the rags to the knives *b*, where they are cut in a direction across the cut of the first knife. It will be observed that the first knife cuts the material in a direction parallel with the axis of the revolving knife, and that the strips, falling as they are, are deposited lying in the same direction on the apron *f*, and are thus by a positive feed carried and delivered to the rotary cutter *b*, where the strips are separated into short pieces.

The size to which the material is cut by the first knife may be varied by varying the feed, by varying the rapidity of the revolution of the cutter *a*, and the size to which the material is cut by the cutters *b* is varied by varying the distance of separation of the blades. The size to which the stock is reduced may therefore be easily controlled by the operative. It does away with the objection which might be made of the knives *b* wearing unevenly. I require one set a trifle faster than the other, thus distributing the wear over the whole surface of the cutting-faces.

To assist in the feed of the rotary cutters, I rotate the edge, as shown in Fig. 6, of either or both sets of cutters.

The beater-bar is made in sections, as shown in Fig. 8, each section *c'* being held in position by a spring. Thus, if a thick piece or bunch of rags pass through and force a portion of the bar from the beater, the other portions are unaffected. The sieve has a vibratory motion, and is provided with flails *x*, which lie directly upon the bottom of the sieve, being held in place by cords *z*, or other like means.

The rags, being fed in the sieve at its upper end, pass down the incline between the wire mesh and the flails. The rapid motion of the sieve causes the flails to rise and fall, thus cleaning the material and pounding out the dirt and foreign matter in its passage through the sieve.

The feeding device illustrated in Fig. 9 consists of an endless belt provided with hooks or fingers which project from the surface, and when the point of delivery is reached, retreat below the surface, thus completely freeing the rag. The rags are deposited in the hopper, and as the pins pass upward through them they catch

moving belt. This construction—*i. e.*, a feed taking from the bottom—is of material advantage in many respects. Clogging is avoided, as the pin, being loaded at the bottom and thus covered, passes through the mass without any addition. The tendency of the mass is to roll from the apron at the top and toward the apron at the bottom. The pressure of the rags in the hopper tends to hold the rag which is being drawn from the mass, thus materially aiding in opening and straightening out the knots and bunches in which the rags are frequently found. A roll *u*, located at the bottom of the hopper, revolves slowly toward the belt, thus keeping the throat filled.

I construct the pin as shown in Fig. 12, it being pivoted to a frame, which frame is secured to the belt. The position occupied by the pin when out is shown in dotted lines, and when withdrawn in full lines. The rolls *r* are grooved to permit the pins and boxes to pass, as shown in Figs. 10 and 11. The rolls *r'* permit the pin to pass, while the roll *r* is grooved only sufficiently to allow the box to pass, the pin being held projecting. It will thus readily be seen that the projecting hooks will catch the rags on their passage through the hopper, and will retain their hold until reaching the roll *r'* at the top of the frame, where the pin is permitted to retreat, and the material, being released, is deposited upon a belt or feed-rolls, as may be desired. The belt may be strained on the rolls, but I prefer to secure the links (shown in Fig. 14) to the edges of the belt, and provide spur-wheels at each end of one or more of the rolls, which spurs will engage with the links and move the belt.

Heretofore the blades or cutters for cutting rags have either been made wholly of steel, or were provided with steel facing or cutting-edges. The objection to this construction is that the steel is carried away in fibers or threads. I substitute for steel a cutter made wholly of charcoal-iron chilled. This gives a cutter of sufficient hardness, and the wear or loss is in the form of a very fine powder, leaving a sharp cutting-edge. To increase the capacity of the machine, I arrange a set of cutters at the opposite side of the frame, similar to the first set, and feed to the second cutters on an apron, as indicated in dotted lines.

The feed-rolls may be either smooth or roughened. I prefer to use rolls having roughened or corrugated surfaces, and provide a means to force them together for the purpose of crushing and breaking such foreign matter as may be loosened in this manner.

In this machine I use two sets of cutters of different construction, for the reason that the machinery that would otherwise be required to turn the strips and present them in proper manner to the cross-cutters is avoided. A machine is thus constructed having a direct and positive feed.

By showing various constructions, methods,

modification all that may be protected by Letters Patent, I do not abandon the same, but intend to make such features the subject-matter of other applications.

It will readily be seen that the several operations may be accomplished by separating the operative portions of the machine and causing them to be operated as separate machines, conveying the material by proper means from one device or portion to the other, and that very many modifications may be made without departing from my invention. I do not therefore confine myself to the particular construction shown.

Having therefore described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A rag-cutting machine having two sets of cutters, one adapted to cut the rags across the end of the other, in combination with a means to feed the material to the first set and from the first to the second set.

2. A rag-cutting machine having two sets of cutters, one adapted to cut across the end of the other, in combination with a positive feed, whereby the rags, after stripping, are conveyed and presented to the second cutters in such manner that the second cut is across the stripping-cut.

3. The method of dressing rags for paper-stock by machinery, consisting of first stripping the rags by passing between cutters, then cross-cutting the strips by passing between cutters.

4. The method of stripping rags, consisting of passing them through a gang of cutters.

5. In a rag-cutting machine, a gang of rotary cutters or shears adapted to strip the rags, substantially as shown.

6. A rag-cutting machine having two sets of cutters, one adapted to strip and the other to cross cut the rags, in combination with a means to convey the rags from the first to the second cutter without turning the rags in the passage, substantially as shown.

7. A rag-cutting machine having one or more sets of stripping-cutters and one or more sets of cross-cutters, and provided with a means to convey the rags from the strippers to the cross cutters, substantially as shown.

8. In a rag cutting machine, a stripping device located above a feed-apron adapted to convey the strips to a cross-cutting device, substantially as shown.

9. A cutter, *a*, in combination with cutters *b*, and a means to convey the material from the first to the second cutter, substantially as shown.

10. An improved cutter for cutting rags, constructed of chilled charcoal iron, substantially as shown.

11. In a rag-cutting machine, two cutters running against each other, one of which runs faster than the other, whereby the wear is evenly distributed.

12. In a rag-cutting machine, a rotary cutter having a toothed edge, substantially as shown.

13. In a rag-cutting machine, two sets of cutters, *b*, one or both of which is adapted to move, and is provided with a means to move the faces of one set of cutters against the faces of the other set, substantially as shown.

14. A rag-dressing machine having feed-rolls adapted to loosen or crush hard substances, substantially as shown.

15. In a rag-dressing machine, one or more feed-rolls having a roughened or corrugated surface adapted to feed and fold the rags, substantially as shown.

16. A feeding device having pins adapted to retreat at the point of delivery, substantially as shown.

17. The method of feeding rags, consisting of drawing them from the bottom of a mass, substantially as and for the reasons stated.

18. A rag-feeding device having an apron provided with links, and having wheels provided with spurs adapted to engage with the links, substantially as shown.

19. A rag-feeding device having a hopper provided with a clearer, *c*, and a means to carry the rags from the hopper, substantially as shown.

20. The combination of an endless belt provided with pins adapted to retreat below the surface at the point of delivery, and grooved rolls *r*, and a hopper, all constructed and operating substantially as shown.

21. In a rag-dressing machine, a sectional beater-bar having a means to force the sections toward the beater, in combination with a beater and a means to feed the rags to the point where operated upon, substantially as shown.

22. In a rag-cleaning machine, a sieve provided with flails, substantially as shown.

23. A rag dressing or cutting machine having rotary cutters whose axes are on approximately the same horizontal plane, whereby the material may be dropped directly to the shearing edges, substantially as shown.

24. In a rag-cutting machine, two sets of rotary cutters, *b*, of large diameter, whereby the shear angle is so reduced that the material will not be forced away from the cutting-edges, substantially as shown.

CHARLES F. TAYLOR.

Witnesses:

ALLEN WEBSTER.

L. P. BUNKER.

DEFENDANT'S EXHIBIT HH

C. HEMJE. Tobacco-Cutting Machine.

207,868

Patented Sept. 10, 1878.

Fig. 1.

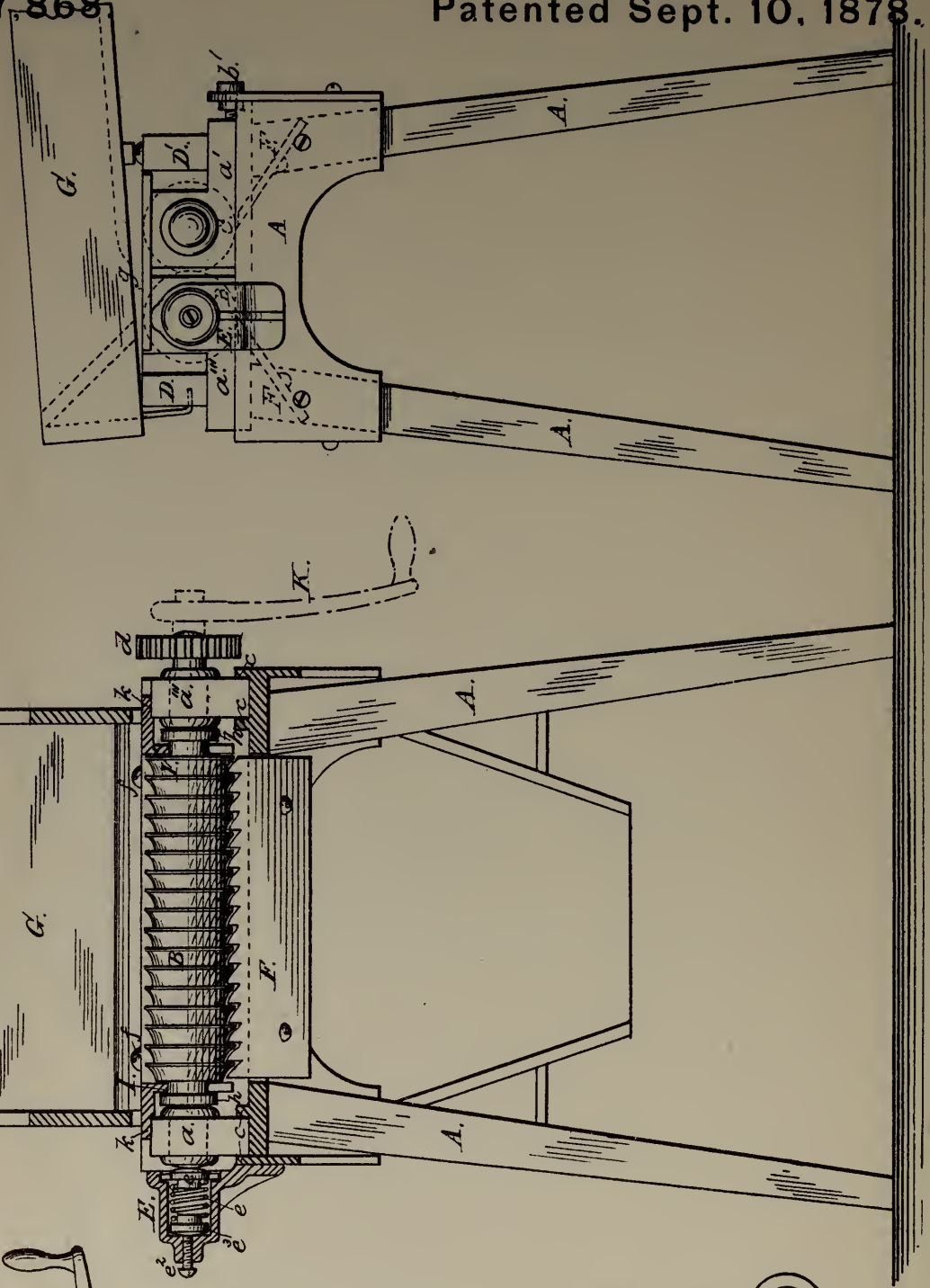


Fig. 2.

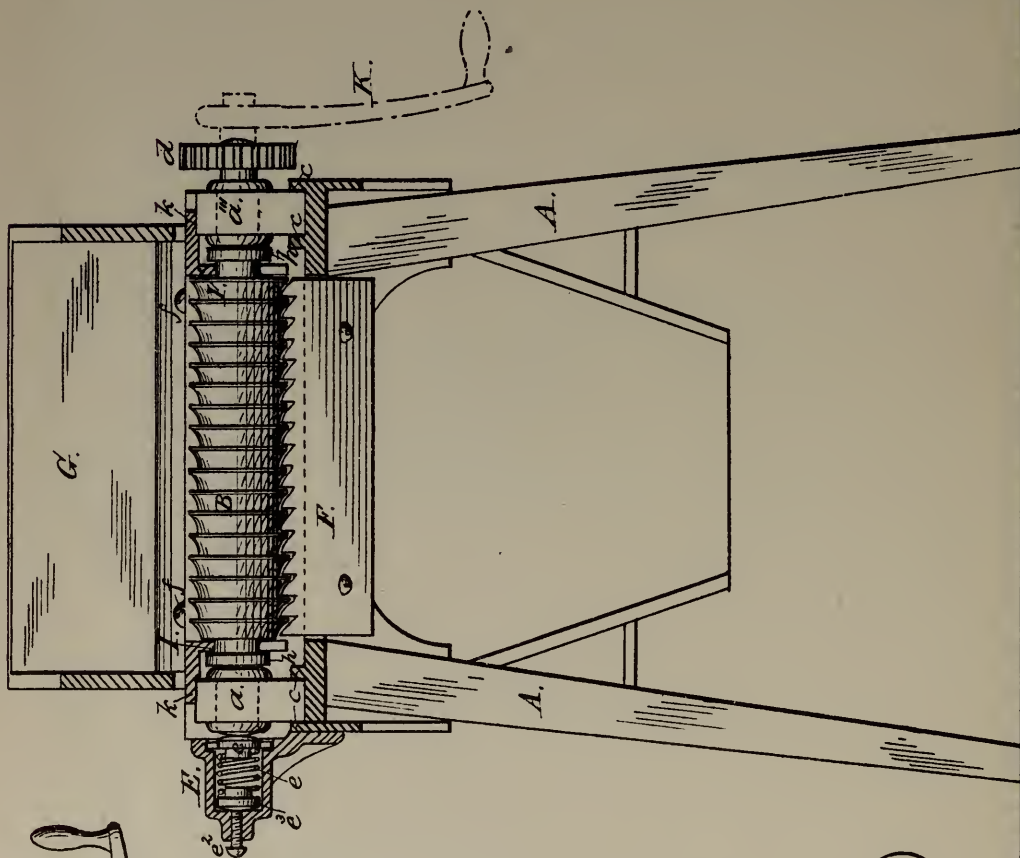


Fig. 3.

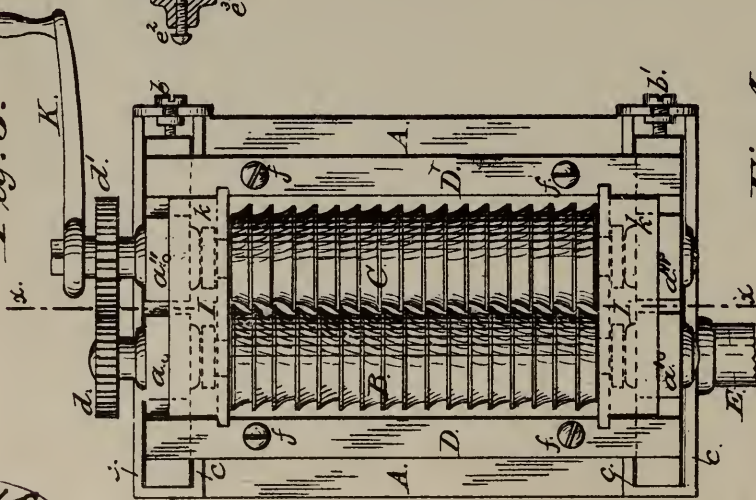
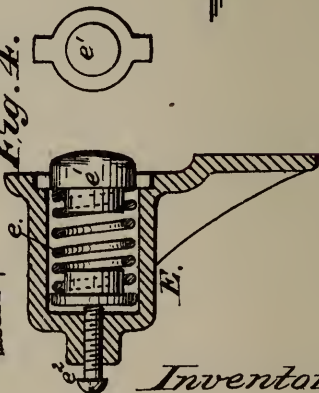


Fig. 4.



Inventor:

Chas. Hemje

C. HEMJE.
Tobacco-Cutting Machine.

207,868.

Patented Sept. 10, 1878.

Fig. 5.

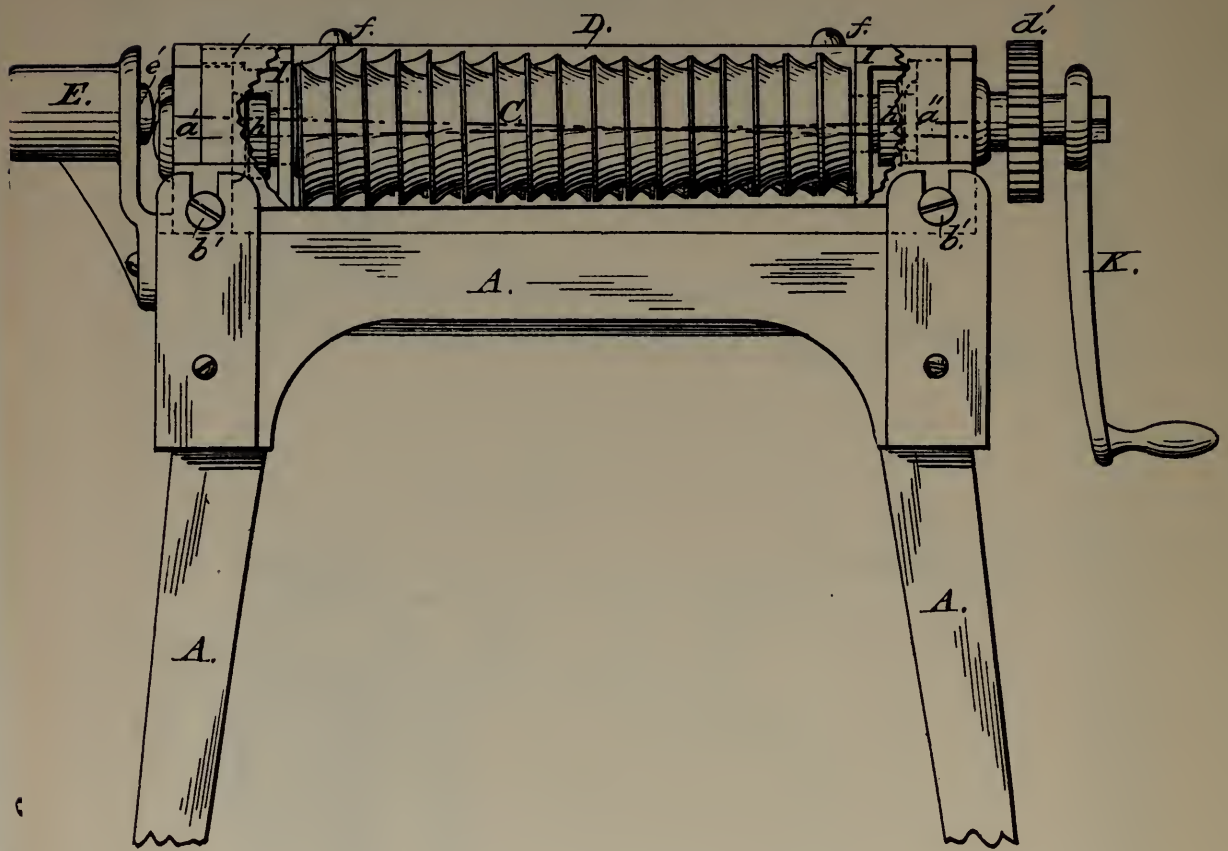


Fig. 6.

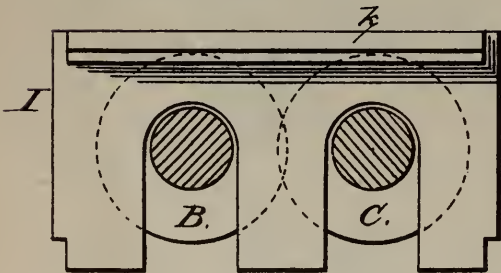
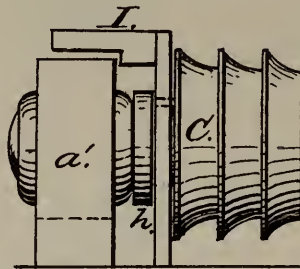


Fig. 7.



సూత్రము:

Barac

Inventor:
Chas Hempel

UNITED STATES PATENT OFFICE

CHARLES HEMJE, OF NEW YORK, N. Y.

IMPROVEMENT IN TOBACCO-CUTTING MACHINES.

Specification forming part of Letters Patent No. **207,868**, dated September 10, 1878; application filed March 15, 1878.

To all whom it may concern:

Be it known that I, CHARLES HEMJE, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Tobacco-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to machines for cutting up leaf-tobacco into scrap or small pieces, such as is now frequently used for making the fillers of cigars; and the object is to improve the construction of such machines.

The invention consists in the construction and arrangement of certain parts of a tobacco-cutting machine, as will be hereinafter described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 represents an end elevation of my machine. Fig. 2 is a vertical cross-section on line *x x* of Fig. 3. Fig. 3 is a plan view of my machine. Fig. 4 is an enlarged section of the spring-pressure case. Fig. 5 is an enlarged side elevation, showing the inclination of the rollers. Figs. 6 and 7 are detail views, showing the partition in position on an enlarged scale.

In the drawings, A is a suitable frame, in which are arranged the journal-boxes *a a' a'' a'''*, the latter two being adjustable by set-screws *b b'* and moving in guides *c c*. In these boxes the journals of the rollers B C revolve, and these are geared together by wheels *d d'*. The rollers are grooved toward their opposite ends, and the cutting-edges are formed by the grooves, and they are placed so that the straight sides of cutting-edges of the one roller act against the straight sides of the cutting-edges of the opposite roller. The

other being alike. The holes for the shafts of the rollers B C in the journal-boxes *a a'* are bored slightly higher than those in the journal-boxes *a' a''*, which are level with each other, and thus the rollers will cut on the principle of the cutting-edges of a pair of scissors. This arrangement is necessary to make the machine cut well, as the rollers are thereby brought at a small angle to each other when viewed horizontally, and thus give a draw cut. Parallel with each roller is a bar *D D'*, resting on the journal-boxes *a a' a'' a'''* and are secured by bolts *f f* passing through them and into the frame, and thus holding the journal-boxes and rollers firmly in their position.

A small case, E, is attached to the side of the frame, with an opening exactly opposite the end of the roller B. In this case is placed a spring, *e*, which acts against a disk, *e'*, which is fixed against the end of the roller B, thereby creating the necessary pressure of the rollers against the other. A set-screw, *e''*, arranged in the end of the case, and by a screw, *e'''*, against which it presses, regulates the tension of the spring.

Inasmuch as nails are often found in tobacco, and would injure the cutting-edges of the rollers by getting between them, the present arrangement is of great value, as it allows the rollers to move a little endwise in case a nail gets between them, and for this reason the machine would not be so easily injured as if set stationary.

Scrapers or combs F are secured in a suitable manner and position, but preferably as shown, so as to act on the bottom sides of the rollers and serve to scrape them, and prevent them from clogging in the groove. A feed-box, G, is arranged on top of the machine, and is arranged so that it can be removed. The bottom of the box partly covers the rollers, so as to leave merely an opening, *g*, large enough for the tobacco to pass between the rollers.

the journal boxes and bearings kept clean. partition can be easily removed when desired. A suitable crank, K, is secured on the shaft of roller C, by which the machine is operated. If two rollers are used, the tobacco has to run through the machine twice. If desired, however, three rollers can be arranged and geared, so that after the tobacco is cut by the first and second rollers it passes on to the third roller, and this latter being geared to the second roller the strips are cut by the second and third rollers. Having thus described my invention, what I claim, and desire to secure by Letters Patent—

In a tobacco-cutting machine, two or three rollers grooved so as to form cutting-edges, and having the journal-boxes arranged at different heights of bearings, in combination with scrapers F, constructed substantially as shown, and for the purpose described.

In a tobacco-cutting machine, the combination of spring-case E, spring e, disks e^1 e^3 , set-screw e^2 with the grooved rollers B C and the scrapers F, arranged substantially as shown for the purpose herein set forth.

3. The combination of the grooved rollers, geared together, with the scrapers F, spring-case E, and the journal-boxes, arranged at different heights of bearings, and their respective set-screws, substantially as shown and described.

4. In a tobacco-cutting machine, the combination of the grooved rollers B C, with collars h at each end, and the partition I, with flange k , for keeping the dust and sand from the journal-boxes, arranged substantially as and for the purpose specified.

5. A tobacco-cutting machine consisting of the frame A, rollers B C, scrapers F, spring-case E, journal-boxes a a' , and the feed-box G, all constructed and arranged as shown and herein described.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

CHAS. HEMJE.

Witnesses:

F. B. QUERC,

H. HUNDERTMARK.

Here

Chas Hemje

DEFENDANT'S EXHIBIT II

F. BURCKHARDT.

MACHINE FOR CUTTING OATS, &c.

No. 313,987.

Patented Mar. 17, 1885.

Fig. 1.

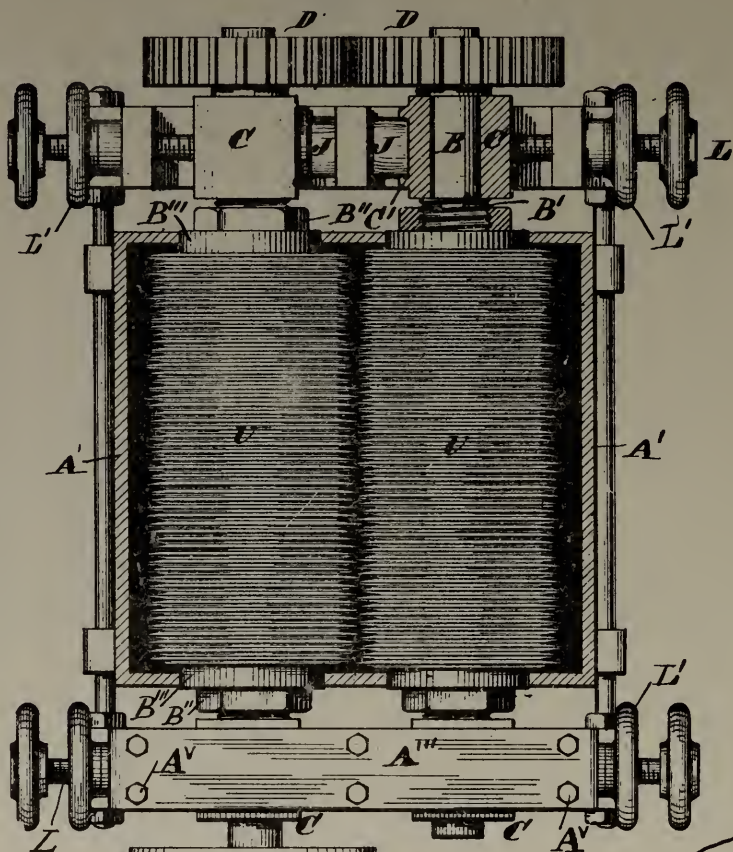


Fig. 4.

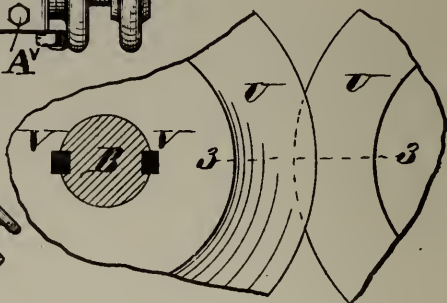


Fig. 3.



Fig. 5.

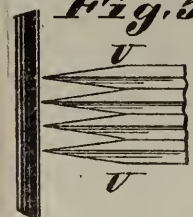
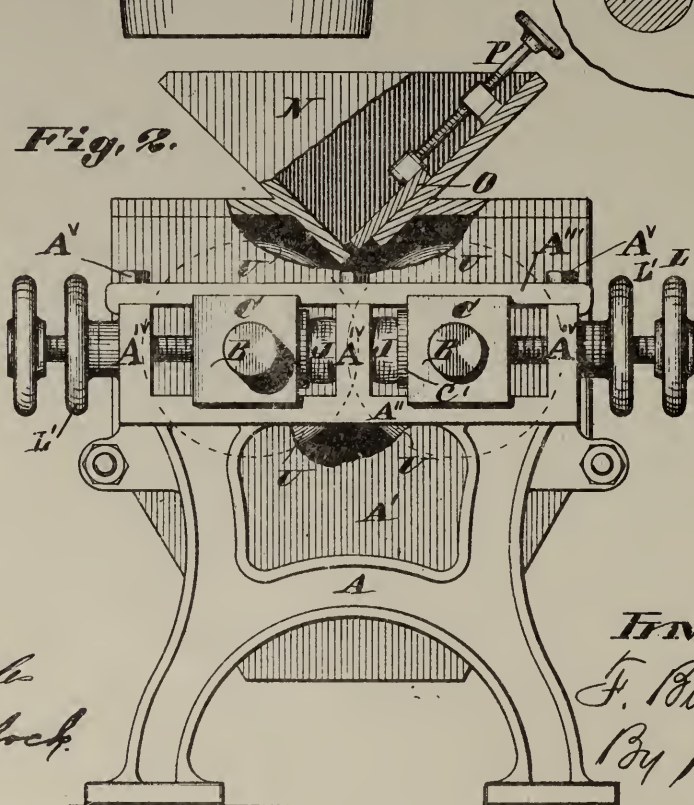


Fig. 2.



Attest;

Charles Pickle
- S. Wheelock.

Inventor:

F. Burckhardt
By Knight Bros.

Atlys

UNITED STATES PATENT OFFICE

FREDRICH BURCKHARDT, OF ST. CHARLES, MISSOURI.

MACHINE FOR CUTTING OATS, &c.

SPECIFICATION forming part of Letters Patent No. 313,987, dated March 17, 1884.

Application filed June 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, FREDRICH BURCKHARDT, of St. Charles, in the county of St. Charles and State of Missouri, have invented a certain new and useful Improvement in Machines for Cutting Oats, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a top view, part in section, of my improved slicing-machine. Fig. 2 is an end view thereof, part broken away. Fig. 3 is a detail section of the rolls, showing the form of dress, taken on the line 3 3, Fig. 4. Fig. 4 is an end view of the rollers, showing one of the shafts in section. Fig. 5 is a detail view of a modification.

My invention relates to a machine for slicing or cutting oats or other grain; and my improvement consists in features of novelty hereinafter fully described, and pointed out in the claim.

Referring to the drawings, A represents the frame of the apparatus, supporting a casing, A', forming a receptacle for the sliced material, and the shafts B, in journal-boxes C on ways A'', having top plates, A''', secured to the vertical portions A^{iv} by bolts A^v. The shafts are geared together by cog-wheels D, one of the shafts being provided with a driving-pulley, I. The boxes of the two shafts are formed with sockets C' on their inner sides, and the shafts are arranged in the boxes to be moved to or from each other, to make the machine cut or slice thinner or thicker, the boxes being forced apart by springs J, seated at one end in a socket, C', and at the other end bearing against the central vertical portion. The boxes are caused to approach each other by set-screws L, locked by nuts L'.

N represents a feed-hopper (see Fig. 2) provided with a suitable valve or slide, O, operated by a screw, P.

On each shaft B are a number of disks having sharp cutting knife-edge peripheries, those of the opposite shafts preferably locking, as shown in Fig. 3.

On the inside of the journal-boxes shafts B are screw-threads B', receiving B'', bearing against collars B''', which disks from endwise movement on the shafts. The knife-edge peripheries form V-shaped grooves between them.

The disks are held from turning on the shafts by feathers V, (see Fig. 4,) or other means. It will thus be seen that as the grain is turned toward each other they cut the grain as it falls between them into the hopper in the most effective manner.

One of the rollers could be made movable, as shown at U' in Fig. 5, and the sharp edge of the other cutting against it would in such case act in the same manner as my present form.

I claim as my invention—

A machine for cutting oats, comprising a frame, A, formed with ways A'' A'', and vertical portions A^{iv} A^{iv} A^{iv}, top plates, A''', clamping said portions, bolts A^v, journal-boxes C formed with sockets C', and mounted on the ways between the central vertical portions and the outer portions, springs located in the boxes and bearing against the central vertical portions, adjusting-screws L, nuts L', the screws, shafts B B, slicing cutting surfaces keyed to the shafts, cog-wheels D on the shafts, driving-pulley I, a casing, A', forming the cutting-surfaces, a feed-hopper N, and a valve O, to regulate the feeding of the grain forth.

FREDRICH BURCKHARDT.

In presence of—

GEO. H. KNIGHT,
SAML. KNIGHT.

(Testimony of George F. McDougall.)

Mr. WINTER: Which file wrapper is that cited in?

Mr. FENLASON: Cited in the Rafter file wrapper.

Q. Now Mr. McDougall, with reference to this statement you say Mr. [231] Wheeler made down in the premises when we were viewing it, was anyone else present besides Mr. Pierce?

A. Well, there were several people present in the room, but whether they overheard the statement or not, I couldn't say; we were sort of in a group by ourselves; there were three of us in the group, the immediate group.

Q. Neither his Honor nor myself nor Mr. Hedrick was in that immediate vicinity at that time?

A. Well, not as closely together as we three were together.

Q. Now I notice in this file wrapper here, being Exhibit No. 28 for the plaintiff, that in stating the method, the objects and one thing and another, this language is used: "The invention is a machine for cutting paper and the like into shreds in which the cutting knives are constructed and held so that they may be spaced very close together, and also so that they will release when too much paper is passing through." How is that release effect established?

A. I have only just what the patentee says about it, but he says that that release device—he gives it later in the specifications and explains that spring that allows an endwise movement permitting separation of the plades under certain conditions, as a utility.

Q. If that function were performed though there would be a separation unquestionably?

A. Conceivably it could separate with the machine being crowded, as I think I testified to on direct examination.

Q. You say there would be no wear upon these discs which are in facial contact?

(Testimony of George F. McDougall.)

A. Not appreciably. May I explain that now fully, so you will understand it? The load imposed at the spring is sustained by these discs that are in contact. We have an example of the defendant's machine where two and possibly three are sustaining the whole load of the spring. If the discs were of equal facial contact they will share that load approximately equally, and the wear in any [232] case is very slight, because they roll together and roll apart, there is no sliding contact.

Q. Then you don't account for the bevel that Mr. Rockwell found by reason of the wearing action?

A. There are very slight bevels there, which are almost indistinguishable, and you will remember that in this particular case two discs were carrying the whole load and, according to the testimony, it has been that way for some months, or pretty near a year, if I recall right.

Q. Is it now in the art to place a collar upon a shaft?

A. No.

Q. Is it new in the art to place various thicknesses of washers upon the shaft as a separating means?

A. That of course is really a ridiculous question because——

Q. Well if it is ridiculous, is it new or old?

A. Oh that would be—that would be a poor piece of workmanship, and of course that is not new.

Q. So that a poor piece of workmanship would then throw out the facial contact on these rolls here. Is that correct?

A. Well it would depend on whether it worked that way or not.

Q. Do you know in Mr. Hedrick's machine how many rolls it had upon it?

A. How many discs?

Q. I don't mean how many rolls, but how many discs?

(Testimony of George F. McDougall.)

A. I didn't count them, but there were a considerable number.

Q. Assume that there were ninety discs.

A. All right.

Q. With ninety surfaces of contact what horsepower motor do you think it would take to pull that?

A. What horsepower motor?

Q. Yes.

A. That is a matter that could easily be calculated. It would take a very small amount more power than it would where none of [233] them were in facial contact, but no more power than it does with two or three in facial contact, because of the fact it is the load imposed by the spring and it is immaterial whether that load is carried in one place or in ninety places, as long as you don't make the metal seize. Whenever the metal seizes then of course an additional load of considerable amount is imposed, but no indication of anything of that kind there. And I would say it would take no more power to take Mr. Hedrick's machine now and put all the discs in approximately facial contact; if that could be done; so that each disc resting on another disc say, with proportionate share of the load, no more power would be required to run it than is required at present. That is running it empty or running with paper in is an entirely different matter.

Q. Running with paper in does the bevel edge there act as a sort of—give a sort of cam action?

A. No it does not if the edges are sharp.

Q. If the edges are not sharp what action is imparted?

A. If the edges are not sharp the machine will promptly clog. Of course there are degrees of sharpness.

Q. I understand that, but will they then impart a cam action?

A. I don't get what you mean by cam action. A cam is something that doesn't appear with that machine; there is no mechanical equivalent of cam in the machine, nothing that would have a cam action.

(Testimony of George F. McDougall.)

Q. The sides of these discs are beveled, are they not?

A. Yes, they are.

Q. And would not that impart a spreading movement when objects are run through?

A. It would not tend to that, no sir.

Q. It would not have a wedge-like effect?

A. No, the wedging is in the opposite direction; when the blades are dull the paper tips over between the blades and attempts to spread the blades apart, and will spread the blades apart; that is [234] exactly contrary to any action that beveled edge could have, the opposite direction.

Q. And that tendency to spread might actuate against the upper spindle?

A. That will be opposed by the spring.

Mr. FENLASON: Yes; I think that is all.

Redirect Examination.

Questions by Mr. WINTER:

Will you look at Exhibit GG, and see who that patent was granted to?

A. Yes.

Q. To whom was that patent granted?

A. It was granted to C. F. Wheeler, on October 9, 1883.

Q. What was the object of that patent?

A. I beg pardon.

Q. What was the object?

A. It says: "The object of my invention is to provide a means for and a method of stripping rags by machinery; and further to obtain by machinery a product of a uniform or approximately uniform size; and further to provide a machine which shall both strip and cross-cut the stock at one operation—that is to say, with but one handling; and further to provide a means of removing

(Testimony of George F. McDougall.)

foreign matter from the rags at the same handling as when cut, and further, to accomplish the results desires as hereinafter set out.”

Q. You are of course acquainted with the Antonsen machine. To what extent would his patent claims read upon Antonsen’s machine?

A. It does not read upon the Antonsen machine at all.

Q. Why not?

A. Notwithstanding the fact that the discs shown in Figure 3 of the drawing are shown out of facial contact apparently, we must always read a drawing in the light of the specifications, and the specifications of the patentee says: “a represents a revolving blade adapted to cut the rags into strips.” That is another element [235] up here. “bb represents rotary cutters or shears in gangs adapted to make a shearing cut.” That bb is shown here and here, near the top of the drawing, and represents these two rollers having the discs on. Now we must always read that drawing with reference to the specifications, so that the specifications say they are adapted to make a shearing cut of the rag.

Q. The drawings are diagrammatic, are they not?

A. Let us see what it says about Figure 3. I haven’t had much time to study this thing. It says——

COURT: Just a moment. This is not introduced, as I understand, for the purpose of bearing on prior use in the art, but simply as illustrative of the file wrapper. In other words, the only principle I was following was to allow the whole document to be introduced, therefore the references. Of course if you are going into this question of prior use I am inclined to think I will allow counsel to examine on them. You stopped his cross examination on this proposition.

(Testimony of George F. McDougall.)

Mr. WINTER: The only thing that bothers me, and I am not clear upon it, to be frank with the Court, whether or not after these patents are in the Court would not consider them as evidence for whatever they are worth.

COURT: That wasn't my theory.

Mr. WINTER: I know, but I may be wrong about that.

Mr. FENLASON: I have no objection to going into it.

Mr. WINTER: If you state you want to put them in.

Mr. FENLASON: Yes.

Mr. WINTER: You are going to argue now that Antonsen had been anticipated in these patents you put in?

Mr. FENLASON: I think it does so show.

Mr. WINTER: That is your purpose in putting it in.

Mr. FENLASON: I did argue that point, and the objection was sustained. [236]

COURT: I sustained the objection on the——

Mr. FENLASON: I have no objection to allow them to go into it. I want that point clear.

COURT: I understand you haven't, but I don't think properly an issue in the case, under your present answer, as far as that is concerned, and that is why I allowed it in for the purpose of illustrating that file wrapper, as a complete document. I don't expect to decide the case upon the question of whether this was an anticipation or not, because that is going to raise a whole new case.

Mr. FENLASON: I raised the point, as I recall it, that since they voluntarily came in with their file wrapper which discloses this, then they voluntarily opened the question of their anticipation. I raised that as a matter of law, as I understand, and was overruled in that respect.

(Testimony of George F. McDougall.)

COURT: That was my theory.

MR. FENLASON: But I am perfectly willing to have this go in, and I don't make any objection to this form of examination.

MR. WINTER: May I ask the witness an informal question? How long will it take us to go into it?

A. I beg pardon?

Q. How long will it take? I don't want to consume too much time.

A. Let me explain something, if it please the Court. The study and value of a patent is rather a formidable matter; every word of it must be weighed with the rest of it, and I am not capable of sitting up here reading a patent, picking out parts of it and analyzing a patent upon short notice. I don't believe any man can do that; I can't.

MR. WINTER: All right; we can pursue that in the final argument of the case.

MR. FENLASON: May we have that understanding?

MR. WINTER: No, I won't agree to that. You will have [237] to rest on the law, whatever it is, and the Court's ruling.

COURT: My present ruling is it is not within the case for either side.

The depositions of Claude C. Rafter, G. H. Thompson, Thomas E. Henderson, B. T. Ryan, Claude E. Rafter, R. A. Benson, Leonard E. Simpson, William D. Rainwater, Charles W. Palmer, E. L. Foster, and Mrs. E. L. Wright, taken before James J. O'Brien, a Notary Public in Seattle, on April 6 and 7, 1933, were stipulated by Plaintiff and Defendant to be a part of

the Court record, and that Exhibits on behalf of the Defendant mentioned in said deposition being Numbered 1, 2, 3, 4, 5 for identification, 6, 7, and 2a, and exhibits on behalf of the Plaintiff being A, B (box of paper excelsior previously marked Defendant's Exhibit No. 5 for identification), B1, (4 strips of paper excelsior contained in Exhibit B) and C were by stipulation admitted in evidence.

Testimony of witnesses on deposition.

CLAUDE C. RAFTER.

My name is Claude C. Rafter. I live in Seattle, Washington. My oldest son is Claude E. Rafter. He is living with me. Early in 1923 we lived in the Ballard District of Seattle. While there, in June or July of 1923, I conceived of a machine for the making of paper excelsior. At that time I saw some ice cream cones packed with paper excelsior. In the sunlight it looked like newspaper. Upon examination I found it was printers trimmings, from one-eighth to one-half inch in width, heavier than newspaper. I went to Dad McLean of Ballard and had him make me a roll out of steel casting about eight inches long, and put creases in about one-fourth of an inch deep, and about one-fourth of an inch apart. I bought a noodle cutter which was as thin as a razor blade, mounted it on another shaft on top of the steel roller, wringer fashion, and it cut paper. The top knife went down into the bottom roll one eighth of an inch. This machine soon filled the creases in the bottom roll and would [238] not go any farther. As soon as I found it would not cut paper any length of time without filling up these creases, I got the idea of having a knife on the bottom, same as on the top, only thicker, I went to a machinist and we built a suc-

(Deposition of Claude C. Rafter.)

cessful machine that turned by hand about the 1st of August, 1923. It was made out of common washer blades, beveled on one side, a number of them on a roll, two rolls put together like a wringer. A bale or two of this product was given to G. H. Thompson, Inc., to try out. Paper was fed into the rolls like a wringer. The idea was to go ahead with it, if it did work out. This machine produced paper excelsior. Rolls had gears, and when the paper went through the rolls it dropped in every shape and form, depending upon the speed the machine ran. Sometimes it would shoot it away out and sometimes drop away around and tangle up in a haphazard manner, in every way that it was possible for it to tangle up; this was a natural physical phenomena of the operation of the machine. In January, 1924, I made a sketch of it, in order to keep from taking the machine to the patent attorney, and took the sketch, together with a sample of the paper, to him and explained to him how it worked. Sketch is Defendant's Exhibit No. 1. I am not a draftsman, but I done the best I could and the attorney understood it. By the way, that is the machine I standardized on. Sketch admitted in evidence. Letter "a" is the shaft that holds the knives. Letter "b" is the corresponding shaft on the lower roll. There were gears on both shafts, and when power was applied, shafts a and b turned in opposite directions. Letter "c" is one of the circular knives. The knives were round pieces of steel ground on a surface grinder, beveled on one edge. The first machine talked of and described so far had a crank on it like an old-fashioned grind stone, and did not have motor power; power was applied in about fifteen days, about the middle of August, 1923, and the business commencing August 1, 1923, grew until January 1, 1924, when I went into

(Deposition of Claude C. Rafter.)

the excelsior business alone. I am operating an excelsior machine at the present time in Seattle. Exhibit 2 [239] is a sample of excelsior I now produce. The first excelsior was interlaced and resilient like Exhibit 2. It had the appearance of a sawed edge or broke or crushed. It would not have a cutting effect on the hands of a party handling it. First sale was made to G. H. Thompson, Inc., 1600 Dexter Avenue, Seattle, Washington. Also sold to Schwabacker Wholesale Grocery of Seattle, Crescent Manufacturing Company, Seattle Hardware Company, Brown and Haley of Tacoma, Wholesale Grocery House in Bellingham, The National Grocery in Seattle. The product was open for sale to the public, manufacturing was done at 6209 14th Avenue Northwest, Seattle, under the name of Sunset Paper Excelsior Company. The manufacture was open, and T. E. Henderson saw me working on this machine daily and operating it. He lived in the vicinity. When power was applied to the machine I built a canvas conveyor four or five feet long, running from the lower shaft on the machine to a wooden roll the size of the knives. You would lay the paper on there and it drew right up to it. The next machine that I built I standardized from, and sold to Mr. Henderson and his partner, sometime in February, 1924. The machines were open to purchase and inspection by the public, which was invited. I sold a machine to Mr. Wheeler thirty days later, around March, 1924, for the Portland territory. I allocated certain territory to certain machines. I have a copy of some of the contracts, one with Mr. Foster, Mr. Calhoun and Mr. Henderson. The Henderson-Calhoun machine went to Frisco. That was the first machine sold for any territory. I sold a man named Carlson. He had a partner, I forget his name, around March, 1924, to go to Chicago. All

(Deposition of Claude C. Rafter.)

machines were sold for cash. Exhibit 3 is a photograph of one of my standard machines, although I can't tell which particular one except through hearsay. Last time I saw the Hedrick machine was a year ago. Exhibit 3 marked with initial "a" to identify angle iron brace that was a change in the machine photographed over the one constructed by me. That is the only change I see in the photograph over my machine. The capacity of the machine [240] depended upon the motor and feeder. I have had machines that fed a ton a day, and some that fed three tons. A ton would be using half a horse-power, and three tons would be using five horse-power, with a faster feeder. It also depends on the newspapers you get. I had ninety to one hundred discs on each roll, with a quarter inch spacer. The spacer was a washer made of fiber and sometimes steel.

Q. I see a spring, which I will identify and mark by the letter "D". Do you observe that spring there, sir?

A. Yes. I put it there.

Q. What was the mechanical function of that spring?

A. Well, it was to keep the upper roll against the lower roll, in contact, so it would draw the paper in.

Q. What mechanical phenomena resulted when multiple layers of paper were run through those cutting rolls?

A. Well, it drew on the spring and crushed the paper right on through.

Q. What did that impart to the edge of the produced excelsior?

A. It made a very ragged edge, thicker paper.

Q. What you would call a feather edge?

A. A feather edge or a ragged edge or a sawed edge. The discs on the standard machine were $3\frac{1}{2}$ inches in diameter. They

(Deposition of Claude C. Rafter.)

were revolved at a speed of 800 revolutions per minute. The opposite discs of the upper and lower rolls were not in facial contact. They could not be in metal surface contact; if they were in facial contact they would last only a day. They were set at least a thirty-second of an inch apart, so you could go down in front and look through and see daylight.

On Exhibit 4, the zigzag white mark running through the middle of the photograph is paper coming through. On being further examined by counsel, the witness testified: the gap between the upper and lower discs indicated by letter on Exhibit 4 illustrate the gap between the discs on maps I built, the thicker the paper the more the space. [241]

The discs were never oiled. I stood in front of the machine and saw daylight through the upper and lower discs. I built the machines, and state that if they were operated with the opposing discs in facial contact without the use of lubricants, that the discs would wear out in not to exceed a couple of days; that is, wear the edge of the discs so that there wouldn't be any edge there to massacre the paper.

I met Plaintiff Antonsen in February, 1924. Mrs. Wright, who was working for me, said Antonsen inquired of her if he could buy a machine from me. He came to the shop several days later and we talked things over. I wanted \$3,000.00 for the plant as it stood; had a cutting machine, baler and truck to deliver. The truck was a Model T Ford, worth about \$150.00 to \$200.00. I showed him the excelsior machine in operation and the excelsior was discharged in an intermingled haphazard manner. He observed this though. I didn't call it to his attention. We looked at the excelsior and talked about it. Defendant's Exhibit 2 is a fair sample of the kind of excelsior we looked at at that time. It had a ragged, feather edged appear-

(Deposition of Claude C. Rafter.)

ance. It was not smooth. I don't believe Antonsen examined this machine when it was not in operation. Had the machine been examined at that time, a separation of the discs would have been shown to the extent of about a thirty-secondth of an inch. I sold the business to Antonsen. Papers were drawn up before June 1st, and he took possession June 1, 1924. He paid \$3,000.00, \$2800.00 and note for \$200.00. He operated the machine.

I have recently examined excelsior made by Antonsen on his alleged patented machine, and find that it is a little narrower, and in some respects more ragged edged than mine, and in some, it does not, but the only difference I can see between that manufactured by me in 1924 and his is that he is making his a little narrower.

After I sold out in 1924 I went back to Detroit, Michigan and opened up an excelsior plant in Detroit. I sold excelsior to the Packard Motor Car Company, and a wholesale drug, and several [242] candy firms, and a wholesale grocery. I built more machines, one was sold in Los Angeles. That machine was built about 1926 in September. I sold another machine for Kansas City, but it was never delivered; Antonsen got me this order. He wrote me while I was in Detroit. He stated what a great team we would make in the excelsior business, me manufacturing the machines, and him as a salesman, operating a sales agency for the machines. Antonsen never claimed that he had a like or similar machine until after he had his patent. He then told me that he was figuring on the same thing at the same time that I was. I asked him why he bought me out, and he said to get me out of the way. Antonsen, at my shop about in February, 1924, made the statement in the presence of Calhoun, "I don't think Rafter realizes what a good thing he has got.

(Deposition of Claude C. Rafter.)

He has got a gold mine and don't know it." At that time Antonsen claimed nothing. He knew Wheeler was taking a machine to Portland, Oregon.

I visited Antonsen's plant about a year ago. I have had fifteen years mechanic's experience. I can read blue print drawings of machines. I can read detailed shop drawings. Antonsen's machine in the knives is the same as the standard machine I built.

Q. Have you recently found any excelsior which you manufactured years ago?

A. Yes, I have.

Q. Will you produce it?

A. This (indicating) is excelsior that was made on the machine that Mr. Antonsen bought from me, that Mrs. Wright worked on. I don't know whether Mrs. Wright cut it or not, but it was the machine that was in operation at that time.

Q. How did you come into possession of this excelsior which is contained in the box which I will mark as Defendant's Exhibit No. 5 for identification? How did you come into possession of that excelsior?

A. Well, before I went into the excelsior business I was in the [243] confectionery business, and I handled "Circle" cookies made by the Circle Baking Company, and they came in a box about two feet long and about eight or nine inches wide, and when we sold them in stores you took the cover and took it off and put it under the box. Some stores objected to it because you got the cookies quite dusty, so I had some wooden boxes made with a slot in the top of them so I could slide a glass in. When I went into the excelsior business entirely, exclusively, I had a few of these boxes and I stored them up in the attic in the garage—not in the attic of the garage, but over on the

(Deposition of Claude C. Rafter.)

side of the garage up over the store roof, under the store roof. I put the glass in this wooden box and put the excelsior in there to pack it, and in the neighborhood of a month or six weeks ago, I was up in there looking for something and I found this.

Q. Is this the identical excelsior that you found?

A. That is the same excelsior.

Q. And this is excelsior that was manufactured on the machine that Antonsen purchased from you back in the year——

Mr. WINTER: Objected to as leading.

Q. What machine did you state this particular excelsior was manufactured by?

A. This excelsior, this particular excelsior was made at the time Mrs. Wright was working for me, before I sold out to Louie Antonsen.

Q. Who got the machine which made this excelsior?

A. Louie Antonsen.

Q. Is that the machine for which he paid you three thousand dollars, together with the other items?

A. Yes.

Mr. FENLASON: I will offer this excelsior in evidence as Defendant's Exhibit No. 5.

Mr. PIERCE: Did they have a "Buy American" campaign on then? We would like to identify this strip.

Mr. FENLASON: You can have it all identified. I don't care. [244]

Mr. PIERCE: Here is a strip mentioning an application for a beer license, that particular section.

Mr. FENLASON: You gentlemen can examine this during the noon hour.

Mr. WINTER: Yes.

(Deposition of Claude C. Rafter.)

Q. (Mr. Fenlason) When did this first come to my attention, Mr. Rafter, this Defendant's Exhibit No. for identification?

A. This morning.

Q. You showed it to me this morning?

A. Yes.

Q. In the hotel room?

A. I did.

Q. And you told me then what you have testified to here?

A. Yes.

Q. Have you got your contracts that you made with any of these persons, with Henderson or Foster?

A. I thought I had them with me this morning, but I haven't got them with me.

Q. Can you get those and have them here at 1:30?

A. I will try to.

Q. Will you go out and look for them?

A. I will.

Mr. FENLASON: I suppose we had better adjourn now until 1:30.

Mr. WINTER: I want to ask a question or two with reference to this offer of Defendant's Exhibit No. 5, for identification, before it goes in.

Q. (Mr. Winter) You claim that this excelsior, contained in the box marked as Defendant's Exhibit No. 5, for identification, was made when?

A. 1924.

Q. In 1924?

A. Yes, sir. [245]

Q. And it was made by you on this machine, on your own machine?

(Deposition of Claude C. Rafter.)

A. No, I didn't say that. I said it was made by the machine that I sold to Louie Antonsen.

Q. Was it made before you sold it or afterwards?

A. Before.

Q. Then, you owned the machine before it was sold?

A. Yes.

Q. Then, it was made by your machine?

A. Yes.

Q. Before you sold it to Antonsen?

A. Yes, sure.

Mr. FENLASON: We can resume at 1:30. We can leave that excelsior there. I have no objection to your examining it at any time.

Mr. PIERCE: Here is one strip "April 3, 1931."

Mr. WINTER: Here is one "Vetoed by Hoover."

Mr. FENLASON: While you are examining that, for the record I want to ask a few more questions before we go out to lunch. I think it is proper that these questions be asked before we go out, under the circumstances.

Q. Referring to this exhibit (Defendant's Exhibit No. 5 for identification), you say that you found that up in your attic?

A. I did.

Q. And that you had stored the same up there when you left?

A. Yes.

Q. And you went back into the attic there a short time ago, is that right?

A. I have been in there several times.

Q. But you found this container a short time ago, is that right?

A. Yes, I did.

(Deposition of Claude C. Rafter.)

Q. When you placed these containers there in storage, you thought they contained excelsior manufactured at that time, paper excelsior?

A. I did. [246]

Q. Did you believe, when you found this, that that was the excelsior that was originally put in there?

A. I did, yes.

Q. Did you make any particular examination of it?

A. I did not. I just took it for granted.

Q. Do you know whether or not someone having access there might have filled these containers up?

A. Could have.

Q. Could have?

A. Yes, they could have.

Q. Have you multiple of these boxes; more than one container?

A. The glass was packed in one.

Q. The glass, what?

A. The glass was packed in one.

Q. Was there excelsior in any of the others?

A. No.

Mr. WINTER: We have no objection to the exhibit.

Mr. FENLASON: I will withdraw the offer.

Mr. WINTER: No.

Mr. FENLASON: You can put it in. It is yours.

Mr. WINTER: What?

Mr. FENLASON: You can put it in if you want to. I have a right to withdraw the offer.

Mr. WINTER: No, you have not.

Mr. FENLASON: Well, I am doing it right now. If you want to put it in, you can put it in.

(Deposition of Claude C. Rafter.)

Q. Do you know whether or not any of the other containers up there contain any excelsior?

A. I have never looked for it further.

Q. Will you look further during this noon hour?

A. I can't. That is three or four miles from where I live.

Q. Will you see if you can find those contracts?

A. What time is it now? [247]

Q. 12-10.

A. I will have to hurry.

Mr. PIERCE: Before Mr. Rafter leaves, let us get this in the record. We have three strips which we would like to put into an envelope to be identified as coming from this box, Defendants' Exhibit 5 for identification.

On one strip there is printed "Vetoed by Hoover;" the second strip has the wording "Condemnation, April 3, 1931;" and the third strip has this statement "Dr. L. R. Roberts, Ventura, California, national champion of 1919." These three strips I will insert in this envelope. Do you want to mark this as a Plaintiff's exhibit?

Mr. WINTER: Identify them on cross-examination.

Mr. FENLASON: I want the witness to make such explanation as he cares to make before we go out to lunch.

Mr. WINTER: Go ahead. Have him make any explanation he desires to.

Q. (Mr. Fenlason) Have you any explanation about this situation, Mr. Rafter, that you want to make?

A. Understand, I told you in the first place that I put this glass in this wooden box.

Q. Yes.

A. And I packed it with excelsior, paper excelsior.

(Deposition of Claude C. Rafter.)

Q. Yes.

A. I remember that at the time I was trying to sell people that manufactured glass excelsior instead of hay, which they were using, and the thought struck me then when I put this away, and I took this out of the garage and took it out of the wooden box that it came in, that it was packed in, and the only explanation I have to offer is that it got mixed with the excelsior that I was offering as samples.

Q. This box which is marked as Defendants' Exhibit No. 5 for identification, is that the box you found it in? [248]

A. No, it is not.

Q. That is, you put it from the original container into this box?

A. Well, the original container is a wooden box and it was all dirty and dusty, and I thought it would be much better to put it in a cleaner box.

Q. Do you know whether you stripped the dirty wooden box complete of its contents?

A. Well, that I couldn't say right now, no.

Q. Could you check up and ascertain that fact?

A. I couldn't without going out to the factory.

Q. How long would it take you to do that?

A. Well, I live at 95th and Meridian; that is right straight out north and the factory is over in Ballard.

Mr. FENLASON: Well, you be back at two o'clock.

Mr. WINTER: Let me ask a few questions before we recess.

Q. (Mr. Winter) When you found this wooden box with the glass in, what did you do with it?

A. I took it into the factory.

Q. Into your factory?

A. I did, yes.

(Deposition of Claude C. Rafter.)

Q. What did you do next?

A. I left it there in the box.

Q. Didn't you do anything with it?

A. No, just left it there.

Q. You took this excelsior out of that box?

A. I took this excelsior out of that box yesterday.

Q. Yesterday?

A. Yes.

Q. What did you do yesterday? Just tell us minutely what you did?

A. I put it, I supposed, in this paper box that I have got it in here.

Q. Aren't you sure now whether you took the excelsior out of that wooden box and put it into this cardboard box? [249]

A. Well, do you mean to tell us you brought this paper box here into court and swore straight up that it contained excelsior that you made prior to 1924?

A. Well, I supposed it was excelsior that I got out of the box at the garage.

Q. You supposed that?

A. Yes, the same excelsior, unless that got switched in the factory.

Q. Unless it got switched in the factory?

A. Yes.

Q. You are not sure whether you put any paper excelsior out of the wooden box into this paper box, or not?

A. Oh, yes, I put it into some paper box.

Q. But you are not sure that you put it into the paper box that you offered in evidence here?

(Deposition of Claude C. Rafter.)

A. No, I am not sure of it now; not now, I ain't because the excelsior that I cut in 1924 would not have this last dope on it.

Q. The reason why you are not sure of it is because we picked out strips of paper excelsior that came from newspapers that were not published until five years after 1924? That is the reason?

A. No, that is not the reason, no.

Q. That is not the reason?

A. No.

Q. You realize that these strips that we have especially identified, one of them bearing date of 1931—you realize that you did not make that excelsior in 1924?

A. Yes, I realize that.

Q. You realize that Mr. Hoover was not president in 1924 and did not veto any bills as president in 1924?

A. Yes.

Q. So, those particular strips that were in this box were not made in 1924?

A. No, they were not.

Q. And you noticed that in selecting those particular strips from [250] the box we examined them and found that they were tangled up and mixed up with the rest of the paper excelsior in a haphazard manner? The reporter can't get your nods in the record.

A. What is the question?

(Question read).

A. Well, that could be put into the box there; plenty easy enough; could be taken from one box to another; you could do that.

Q. Yes, but if you had taken it from the box that you have testified about, where the glass was, you could not get those

(Deposition of Claude C. Rafter.)

mixed. You did not mix the excelsior that you took from the wooden box with other excelsior, did you?

A. No, not that I know of.

Q. If you had done it, you would know it, wouldn't you?

A. Yes, I would know it, yes.

Q. You didn't do it, then?

A. No, I didn't do it.

Q. If it was done, it was done by someone else?

A. Yes, my daughter could have done it. She is working there.

Q. She has no interest in this lawsuit?

A. She hasn't? Why not?

Q. Has she?

A. Why not?

Q. She has sufficient interest, do you think, in this lawsuit to try to fool the Court?

A. Oh, no, I wouldn't think that. She has an interest in her dad winning the case.

Q. What.

A. She has an interest in her dad winning the case.

Q. But she wouldn't go to that length to have her dad win a lawsuit?

A. No.

Q. (Mr. Fenlason) And dad wouldn't either, would he?

A. No. [251]

G. H. THOMPSON,

witness for Defendants.

I live in Seattle, am a candy manufacturer, residing here since 1923. I purchased paper excelsior from Claude Rafter

(Deposition of G. H. Thompson.)

under the name of G. H. Thompson, Inc., about the middle part of 1923, and it was the first I ever saw. We used it as a packing material to fill in space. We had formerly used wood excelsior. We liked paper excelsior better than wood right from the beginning. The wood had more dust. The paper was more free of dust. We have continued to use paper excelsior to the present time. We are buying paper excelsior at the present time from the Pacific Coast Paper and Container Company, and have bought from them for the last four or five years. The edges of the first excelsior bought from Rafter were irregular and rough, it was shredded. I don't know any other way to describe it.

Q. I will call your attention to Defendants' Exhibit No. 2 and ask you to examine the edges of that excelsior. Is that a fair specimen, as respects the edges, of what you at that time received?

A. You mean by that, the kind we are using now?

Q. No, the kind you got from him. Was it rough like this?

Mr. WINTER: Don't lead the witness.

Mr. FENLASON: I beg your pardon.

Mr. WINTER: Let him testify.

A. Well, I would say that this is—you can readily see I am not a technician on this, but I did look at it at that time very thoroughly because of the fact we were changing from wood to paper excelsior, and I was interested. I would say that this is very similar to the kind of excelsior we have been using right along from the beginning.

Mr. FENLASON: You may cross-examine.

Mr. PIERCE: That is what exhibit?

Mr. FENLASON: No. 2.

(Deposition of G. H. Thompson.)

Cross Examination. [252]

I have no independent recollection at this time as to the width of the strips of excelsior bought in 1923. I did not use this paper excelsior myself very often, but I saw the shipping clerk, Mr. Poole, using it. Mr. Poole is now working for the Imperial Candy Company in Seattle. We started buying excelsior from Rafter, I think, about the latter part of 1923, early fall, and bought from him for about a year. I don't remember who he sold to. When Rafter sold out we purchased from his successor, the Paper Excelsior & Pad Company. I never heard of Mr. Antonsen. So far as I know all of this excelsior was about the same. I have never noticed any difference at all that I could tell you about. I didn't do that packing work myself. I cannot say whether the excelsior in Defendant's Exhibit 2 is cut or torn. I would assume it was cut in some way, I wouldn't say it is torn; I don't know. I couldn't tell you whether it is cut or torn. I never saw any made.

THOMAS E. HENDERSON,

witness for Defendants.

I live in Seattle now, and lived here in 1923, at which time I was a shoemaker in the Ballard district. Thomas W. Calhoun, who lived in Ballard, advised me, to go see Rafter's machine, which I did. I had never seen anything like it, it was quite a rarity. Mr. Rafter was there. I had known Mr. Rafter a year or two before that. I was there sometime in September or October, 1923. I helped operate the machine. It was run with a motor, about one-half of one horse power. The motor stood four or five feet from the fly wheel. You fed the paper on an apron

(Deposition of Thomas E. Henderson.)

about the length of this room. They had a conveyor built on it at first. I examined the excelsior carefully. The appearance of this early excelsior as near as I can tell was just like this here, Defendant's Exhibit 2. If I had nothing else to go on, I would say it was cut paper myself. I cut some in California a lot rougher on the edge than that, no trouble to do it. It had a torn or feather edge. The paper in being discharged from the machine "just came right out." It would fall to the floor and roll up together. It would go through the machine [253] one piece after another, come through and lay on the floor. They would throw it up in a pile. As it piled up, it would roll down, roll into knots like. Would not lay smooth. About March 1, 1924, I had a conversation with Antonsen, when he said "This is a wonderful thing, isn't it." "You are going to San Francisco?" "Well, you have got the best town on the coast. Rafter has got a mint and don't know it." I sold John C. Calhoun a machine about February 25, 1924. The machine was shipped to San Francisco. I went there. I don't remember the name of the company that we operated under, it was nine years ago. I can't think of it. It was placed in production and we made sales to the public and solicited generally for business. We sold some steel company, Spauldings, the City of Paris, and places like that. I was there from March until November, when I came home. Mr. Calhoun operated it after that, then he sold out. This was in 1924. There had to be a separation of the discs in the upper and lower roll. They were not in facial contact. We used to take a 12-page paper like you have here. You couldn't cut the Sunday Times with it. You couldn't cut that. It is too heavy. Any of the big daily papers we used to open up, unfold it. If you had too thick a paper, it would choke.

(Deposition of Thomas E. Henderson.)

Damp paper could not feed at all. There was a spring on it to keep the machine from choking. Defendant's Exhibit No. 3 is a picture of a machine like the one I own, only mine had one fly wheel on one side. You had to sharpen the shredding discs frequently; occasionally had to sharpen them.

I helped Mr. Rafter adjust the shredding discs on the San Francisco machine. I also had them adjusted again down there. I made a big improvement after that. It was just a little suggestion of my own, took them down to the machine shop and got leather fiber or paper fiber and cut a lot of little discs to go on the axle where the disc goes on, so as to separate them so much (illustrating) to broaden the width.

Cross Examination. [254]

I learned the shoemaking trade when I was eleven. I am 73 now. I have been away from the shoe making trade eight years. When I saw the Rafter machine in Seattle, it would take and run one up to about six or seven sheets of paper at a time. If you would run more than that it would kinda choke and stop sometimes. You would roll back the fly wheel, roll the paper back. If there was any choked in there, take a hook or whatever we used for the purpose, and hold in between the discs and get the paper out. We used a piece of bent iron or a screw driver would do it. If you fed too many layers, or if it was damp, she would choke. Maybe she would choke once a day; maybe she would not choke for a week after that. I don't remember whether the edges of the excelsior would be more rough, more sawed, if you fed more than four or five sheets or not. I don't know, to tell the truth, I think the edges would be equally rough, whether you fed two or three layers at a

(Deposition of Thomas E. Henderson.)

time or eight or ten. We went to Frisco with the machine on the 14th of March, 1924. I stayed there until November, 1924, and then sold out to Calhoun. I have not been in the excelsior business since 1924. Calhoun is in Chilliwack, B. C. We sharpened and ground the discs or knives. We took them to a machine shop. In the time I was there, we sharpened them two or three times from March to November, 1924; it cut better, take less power and gave more speed. A rough not a razor edge was put on. If the knives or discs got too dull the machine would choke more or less. When the knives got dull, it retarded the feeding of the paper. That is why we kept the discs sharp. Calhoun and I had some trouble with the machine. It used to choke. The discs worked loose. I made some invention of my own. I went and got these leatherette washers and put them on to make a wider ribbon, and they were about $2\frac{1}{2}$ inches in diameter, about a thirty-secondth of an inch thick or a little thicker. Maybe a sixteenth of an inch. After I put the washers on, I don't know whether there was less choking, but it gave out a wider strip, [255] which was our purpose. We did not leave off any of the discs when we added the washers. Sometimes we put two in one place, and sometimes we put a piece of paper between the knife and that. Both the paper and leatherette washer would be between the two discs. There were two coil springs, one on each end of the paper shaft to take up the vibration. The springs gave play to the upper shaft from end to end. If crowded too much on one side, it would go to the other end, then the other way, would operate back and forth endwise. The feeder belt was 12 feet long, not 6 feet on top and 6 feet on the bottom, but 12 feet long. The apron was 12 feet long, the belt 24 feet long. We never shortened the belt. None of our customers required rougher edges. They required us to make

(Deposition of Thomas E. Henderson.)

them smoother. We slowed up the speed of the machine and cut thicker paper, magazine paper, and got a better price. I remember Mr. Pierce; he talked to me one night and I knew what they were after. I said most anything when he asked me. I wasn't on my oath then, I didn't care.

Redirect Examination.

I met Mr. Fenlason for the first time in this office today at about 1:30.

Recross Examination.

I made an affidavit for a Mr. Mitchell about a year ago, an attorney from Portland. He told me he was representing a paper company. I signed the affidavit for him.

Q. (Mr. Winter) Did you know who Mitchell was?

A. He told me he was representing this paper company.

Q. What paper company?

A. In Portland. He asked me about the paper excelsior cutter, and I told him as near as I could just the same as I told you here, straight line business.

Q. But you did not tell the same story to Mr. Pierce?

A. What Pierce?

Q. Mr. Pierce here? [256]

A. I wasn't supposed to.

Q. And that is the reason why——

A. He represented the other side and so—I don't care anything for either side. It means nothing to me. I get nothing out of this whatever.

Q. But you did not tell the same story to Mr. Pierce and Mr. Antonsen that you did to Mr. Mitchell?

A. I did except that one thing there. Haven't I answered all the questions you asked me?

(Deposition of Thomas E. Henderson.)

Q. You told the same story except upon the question that there were certain customers that wanted the paper scalloped instead of smooth?

A. No, I didn't. I said when they wanted it scalloped, we could scallop it.

Q. Didn't you tell Mr. Pierce and Mr. Antonsen that that night?

A. No, sir, I didn't no such a thing. Wouldn't tell anywheres near that. I say, when they wanted scalloped paper we can give it to them. I can fix the machine to give it to him straight if he wants it. I am a paper man, and I know the business.

Q. Yes, I understand. It does not take long for a shoemaker to learn the paper business?

A. I am not only a shoemaker. I am an all-around fellow, if you wan't a mechanic. Isn't that so, Mr. Rafter?

Mr. FENLASON: Don't do that.

A. (Continuing) Nothing better in this town if I do sit here as an old man and tell you.

Mr. WINTER: We are all old.

The WITNESS: Not as old as I am. Not one of you here as old as I am.

Redirect Examination.

Antonsen never told me he had conceived or invented a like or similar machine. He said he was buying one.

B. T. RYAN,

called as witness for the Defendant. [257]

I am a real estate dealer and have lived in Seattle since 1923. Mr. Rafter's place of business was half a block north of mine.

(Deposition of B. T. Ryan.)

I saw the excelsior machine there in the latter part of 1923. I am not a mechanic. I don't know a thing in the world about machinery. I saw the excelsior manufactured and examined it.

The majority of the excelsior seemed to have a feather edge on it, a scalloped appearance, what I would call a feather edge. Defendant's Exhibit No. 2 is similar to the excelsior that I saw in 1923. I would imagine that this was about the same excelsior.

Cross Examination.

In 1923 I would saunter in the Rafter place to look at the machine and talk with him about it. I paid no particular attention to it. All the interest I had was just as a neighbor. He was inventing a machine and I would see how he was getting along with it.

CLAUDE E. RAFTER,

called as a witness for Defendants.

My father is C. C. Rafter. In 1923 I was living part of the time with my folks, part of the time by myself. I was at home when my father was working on the excelsior machine. The excelsior machine was first reduced to practical use by my father in October, 1923. I assisted him. There were two rolls, one above the other. There was a canvas belt running up to the rolls. The paper coming upon the canvas belt automatically went through the two rolls with knives or discs. When we first started out, we put through just a little at a time, thinking the excelsior would look nicer, but when we got to selling a little more, we started crowding the machine and it cut a rougher edge on the paper. The edge was, what you would term, I suppose, a feather edge or a scalloped edge, or anything that

(Deposition of Claude E. Rafter.)

is rough. The paper in being discharged from the machine would just fall out and fly all over. There was no way of keeping it straight. It would get all bunched up and mixed up in a haphazard fashion and this condition existed from the very beginning. Each knife had a spacer between it. There was a spring on the top roll (that tended to keep these knives together, but it didn't do it). [258] It kept the knives from spreading too far when we put through a lot of paper at one time. The discs on the bottom roll have a tendency to spread when you run through multiple thicknesses of paper. The more you put through the more would tear instead of cut, really. All the machines that were built were the same. I can't see any difference in them. I met Mr. Antonsen when he bought my father's business, and then I went to work for Mr. Antonsen after he bought my father out. I started with Antonsen in June, 1924, and remained with him until March 23, 1925. At that time Antonsen was using my father's machine to make excelsior. He told me about no others. He had no others to my knowledge. During this time he did not actively work at the plant, though he might have once or twice helped in a rush. I believe he was running a mail advertising Bureau. He never mentioned to me that he had been engaged in any excelsior business, or inventing any machine having for its purpose the manufacture of paper excelsior. My father sold other machines to Mr. Wheeler for Portland, Mr. Foster for Boston, Mr. Calhoun for Canada. I helped to make and deliver the excelsior manufactured by my father before Antonsen took the plant. I sold to Schwabacher's, Thompson Candy Company, Seattle Hardware Company, and Brown & Haley, in Tacoma. I remained with Mr. Antonsen until March 23, 1925. Mr. Antonsen asked me who my father's patent attor-

(Deposition of Claude E. Rafter.)

ney was, sometime in the winter of 1923 and 1924. Two men came down to our place of business and asked about it, and wanted to take some pictures of the machinery and place for the Seattle Times, around March, 1925. I gave them the material for that article. It was published about six or eight weeks later. It was not at the location purchased by Antonsen from my father. Shortly after the interview, Mr. Antonsen and I severed connections. The information for the paper had nothing to do with my leaving. I never talked to Antonsen after the article was printed, but told him of the interview. He didn't say anything against it, and he didn't say anything especially for it, either, I don't believe. Maybe I didn't give Antonsen all [259] the details of the story that I told the newspaper men. I told him what they had been down there for, and what I told them, and what they were going to do. That met with Antonsen's approval. Antonsen did not protest, because I told the men my father was the inventor.

I have seen and examined the excelsior manufactured by Antonsen and I can't see any difference between it and that manufactured by my father in 1923, the edges and resiliency are the same.

Cross Examination.

When we started to manufacture paper excelsior we thought we had to feed a little at a time. We didn't think it would cut any more. Then we crowded the machine. Then it began to tear. We discovered the tearing shortly after we had first started. We just put a bigger motor on the machine and fed it more paper. That was within a month after we started, the same as the sample in Exhibit No. 2. When we fed a little paper the

(Deposition of Claude E. Rafter.)

edges were not rough or scalloped like when we fed a lot of paper, though they were visibly rough to the eye.

We had only one spring on the upper shaft. My father never built a machine that I know of that had two springs on the upper shaft to allow play room. As far as I know they were all built with one spring. I told Antonsen who my father's patent attorney was.

R. M. BENSON,

called as Defendant's witness.

I have been employed by Seattle Hardware Company, Seattle, for thirty years as Superintendent. In 1924 and 1925 we first used paper excelsior for packing. The first we bought was in the last half of 1924, November or December; I am not positive, but I am positive of 1925. Mr. Rafter was the first man that sold it to me. We stopped using it for a while, and started about two years ago. I never noticed any difference in the texture of the outer edges between the first excelsior bought and that recently purchased. [260] I would have no occasion to notice.

Cross Examination.

I did not handle it, but would go out and see it when I bought it. When we first got paper excelsior we got a lot of complaints, customers complaining that it would pack down, and the hardware would begin to shift and break in two, and we discontinued the use of it for a while. We got complaints about a year or two after we commenced to use it, about I would say 1926 or 1927. I never paid any attention to the physical condition of the

(Testimony of R. M. Benson.)

excelsior. I don't know whether it was wider or narrower, or anything else except we are still buying it. That is, we buy it now.

Redirect Examination.

When we first bought it, it was in bulk. Later on, it was baled. It was more compact when baled, and permitted tighter packing. We used larger amounts after that.

LEONARD E. SIMPSON,

called as witness for Defendants:

I sold old newspapers to C. C. Rafter in 1924, when I was manager of a district for the Seattle Times in Seattle. These papers were made into excelsior in Ballard by Mr. Rafter. I didn't examine the paper excelsior manufactured, just looked at it going through the machine. I became associated with Antonsen in March, 1925. I operated the Rafter machine he bought. That machine had a conveyor belt which fed the paper. After it was cut it would drop down on the floor below the machine and just sort of pile up. If you fed one or two sheets it would naturally just pile up altogether, but if there was half a newspaper it would go down in bulk and just spread out, just fall down. Of course, there would be one or two top sheets, probably would fly around, but the whole business would fall down in one place, in one pile in a cone shape, and would fall over and mix up in that way. I am not familiar with the machines now operated by Antonsen. The edge of the excelsior as I observed it, was rough. I had no conversation with Antonsen about an excelsior machine he invented until after I had left his employment. [261]

(Deposition of Leonard E. Simpson.)

Cross Examination

I had plenty of trouble with the machine. If I fed more than four or five sheets at a time, about every fifteen minutes the thing would clog up, part of the paper would stick in the knives. You would have to shut down the machine, take a screw driver, to jerk or grind out the paper from between the knives, either that or a rasp file. Of course we would not have to shut the machine down to clean it out every time. Had a lot of trouble. Sometimes when the paper stuck it would pull the pulley off and you would have to work your fool head off trying to get the stuff out of between the discs.

A. Yes, I will say you did. If you got too much paper in there, you would have to stop it.

Q. You could not feed more than four or five layers at one time?

A. Well, you could feed one-half of a newspaper.

Q. Would you kindly tell me what one-half of a newspaper would be? Tell me how many sheets that would be.

A. Well, that would be about, I imagine at that time, it would be about, anywhere from twelve to sixteen pages; a thirty-two page paper in two sections. Shove one section through at a time.

Q. But if you did that it would clog repeatedly?

A. It would, yes.

Q. Generally, in order to stop it from clogging, you would only feed four or five sheets at a time?

A. Lots of times, if the paper was too thick, or if I felt the paper was too thick, I would have to take the pages and shove them through a few at a time instead of the full half of a section, or whatever it was.

Recross Examination.

I worked there six months. A year after I left, Antonsen told me about his patent.

(Deposition of Claude C. Rafter.)

Redirect Examination.

He told me he had a new machine, that he had a patent on, that [262] was an improvement on the old machine; that it did not clog, and that you could put through more layers of paper at a time. If the paper was damp, I would never put it through, because damp pieces of paper would clog everything.

CLAUDE C. RAFTER,

called at a witness for the Defendants.

I consulted Harry Bowen, Patent Attorney, about securing a patent on my machine. He applied for a patent. I went to Detroit and wrote my patent attorney several times. Then I went to an attorney in Detroit, in 1927. Defendant's Exhibit No. 6 admitted, being a part of Rafter patent application. (Entire Rafter file wrapper admitted in evidence as Plaintiff's Exhibit 28). Figure 1 of the blue print drawing shows the discs in facial contact. My actual machine was not that way. I was never troubled from the disc overheating or sparks flying. A single sheet would be cut smoother than when five or six or more was put through the machine. Craft paper, when put through, won't cut or tear, just creases and corrugates. That was true of the first machines I built. I am not a patent lawyer. I left the drafting of the application entirely to my lawyer. I showed my attorney what I had, and what I wanted, and left the rest up to him. When I came back to Seattle, Bowen was still in Seattle. He left town about six months after I go back. I went to see him before he left, and we talked about this patent.

I was in Detroit from July 4, 1924, to August 20, 1928.

Cross Examination.

I made my patent application in January, 1924. The first action of the patent office is dated April 16, 1924. Mr. Bowen, my

(Deposition of Claude C. Rafter.)

attorney, called me to his office when he got that action. I read it over at that time, and talked to the attorney about it. I don't know whose writing it is on the back of that sheet. Bowen made the blue print drawing of the machine. He was a draftsman. At the time he made that drawing, he had Defendant's Exhibit No. 1, which was my idea, before him. I made the drawing, Defendant's [263] Exhibit No. 1, and took it to Mr. Bowen, and he prepared the drawing that appears on the first page of Defendant's Exhibit 6. I took that drawing, and we sat down and figured it all out, and from what I told him and from what I knew he made the drawing. He did not go out and look at the machine. I explained the machine and its operation to him fully. I also explained what it did, how it produced paper excelsior and the kind of excelsior it produced. He prepared the drawing on the first page of Defendant's Exhibit 6, after I explained that all fully to him. I saw the drawing after it was prepared. I read it over, signed it and swore to it. He explained that I had to sign it. He explained the whole thing to me, and told me I had to state the object of my invention, and had to describe the machine sufficiently so that a machinist could make such a machine, and the only difference in the machine I sold Antonsen and the ones I made later was the size of the discs. It operated exactly the same as the later machines. The only object in standardizing the machine was to get a standard sized blade, so that if blades were wanted they could be replaced. Blades once in a while got jammed by foreign objects. My attorney wrote me in Detroit when he received the second action from the patent office. He told me what the patent office said. We corresponded back and forth until I returned in 1928. I went up to Harry Bowen's, why my patent had been rejected and Antonsen got a patent. I told him when his patent had issued, and we went to the library, he

(Deposition of Claude C. Rafter.)

showed me a book it was in and said Louie Antonsen had a detail patent and it didn't amount to nothing. I did not take any further action on my patent after I got back. My attorney did not advise me that on October 8, 1928, he filed a further claim with the patent office. He wanted to put a special plea before the Patent Office at Washington, D. C., along with some other cases. He went there personally, then I received a letter while I was in Detroit after he got back from Washington, that my patent had been granted. I didn't hire any lawyers in Washington, D. C., but I hired some in Detroit to check up on the patent. I [264] told them about the machine. They sent a representative down to look at the machine. They examined the product. Bowen examined the excelsior that I made, also when I made my application. I showed him the paper cut.

Antonsen took possession June 1, 1924, when I sold him the business, paper cutting machine, baler, scales and truck. At the time I told him I had made application for a patent. I did not sell territorial rights. I sold rights to operate in the territory. When I sold Calhoun in Frisco I told him I would not sell any other machine in Frisco. I sold Antonsen with the same understanding, that I would not sell in Seattle, but that he could not sell the product in Portland. The first thing he did was ship paper there. I promised him the Seattle territory. The machines were selling at that time for \$1200.00. The business at that time was clearing me \$200.00 a month. I sold Ohio territory for \$400.00 without a machine, with an option to hold it open for that party for six months. The construction of one of these machines costs about a *hundred* of hundred dollars.

I first bought a noodle cutter and that worked into the paper cutting machine that I sold to Antonsen. I operated that machine from the fall of 1923 until June 1, 1924. It did not clog a great

(Deposition of Claude C. Rafter.)

deal; I never had no trouble with it. I heard the testimony of Mr. Simpson, when he said it clogged every fifteen minutes. He was only a boy at that time and didn't know very much about it. I did not have that experience with it to the extent he said he had. I had some trouble with the machine from chewing gum getting on the paper, and in between the knives. You had to use screw drivers, coal chisels and everything to get it off. Sometimes molasses got in. It was not always chewing gum or molasses that caused it to clog. Sometimes it was wet paper, sometimes thick paper, sometimes when you fed too many layers of paper at a time. You could feed about 20 pages of newspaper through, that would be ten sheets. Sometimes the edge of the discs would be turned over when something went [265] through the machine and this would cause the machine to choke up very easily. It would not always go through without clogging. When the machine was new it worked a little bit different than when it was a year and a half or two years old. The machine worked better when it was new. The reason the machine worked better when it was new was because it was polished up and the paper lifted freer than it would when sticky substance had gathered on the cylinders. The polish had something to do with it. I never polished the machine. I don't know why. I didn't advise Antonsen to polish the machine because it was getting old. Antonsen led me to believe that he knew nothing about paper excelsior. I believe I am the man that invented paper excelsior, and the first man to make excelsior out of newspaper anywhere in the world.

Mrs. Wright worked for me half a day every day cutting paper on the machine, starting sometime in January, 1924, and until Antonsen took possession, she principally operated the machine for me.

(Deposition of Claude C. Rafter.)

I sold seven machines. No. 1 was Mr. Calhoun in San Francisco. No. 2 was Greenwood and Carlson in Chicago. Mr. Wheeler got the third machine for Portland. The fourth machine I took myself to Detroit. No. 5 went to Mr. Thompson at Kansas City, Antonsen sold it. No. 6 went to Los Angeles to a man by the name of Rowden, Harold J. Rowden, and the 7th went to Mr. E. L. Foster for Boston.

Mr. Foster sold his machine to Mr. Antonsen after he had it returned to Seattle from Boston. The Los Angeles machine was operating the last I heard of it. I last heard of it when Mr. Antonsen first started to sue everybody that had my machines in the neighborhood of a year and a half ago. I don't know anything about the Kansas City machine. I don't know what happened to the Detroit machine. I don't know about the Chicago machine. Seven machines is all I sold. These were sold before my patent was finally disallowed, as far as I know. [266]

Defendant's Exhibit 3 is a picture of the Portland machine, the one sold to Wheeler who sold it to Hedrick. The washers of that machine were made of fabric when I sold it. They were thin ones, and I put several between each blade. They were made out of a material like cheap suitcases are made out of, about a thirty-secondth of an inch thick. I would put three or four around there, between each two discs. The knives on the machine I sold to Antonsen were beveled.

When a man bought a machine I would allot him a territory in which he could operate. I did that with all the machines I sold.

Referring to Defendant's Exhibit 6, in that application the discs were shown to be in facial contact, but the machine was not. The discs were about a thirty-secondth of an inch apart.

Referring to Defendant's Exhibit 4, the discs are about a sixteenth of an inch apart, some of them a thirty-secondth.

(Deposition of Claude C. Rafter.)

Witness points out some that he considers a sixteenth, and some that he considers a thirty-secondth of an inch apart.

With reference to the distance between the discs, by tightening up the screw, you can draw the knives back into facial contact, but that would ruin your machine. By tightening up the spring, you can make the knives act like a pair of shears in contact. There is a certain amount of overlap about a fourth of an inch between the discs on the upper and lower roll. That is the way I built the machine. They are not beveled on the side that came in contact, but are beveled on the opposite side. They could overlap each other without grinding together.

WILLIAM D. RAINWATER,

called as witness for defendants.

I have been engaged in the novelty business in Seattle since before 1923. I first started to use paper excelsior about 1923 or 1924. I don't remember from whom I first purchased paper excelsior. I think the man pointed to me as Mr. Rafter is the one that I bought the excelsior from.

I do not remember in detail the nature of the paper excelsior [267] I first used. It has been so long ago I never paid much attention to it. In fact, I didn't do any of the packing myself in the early days. I couldn't say whether there is any difference in the first excelsior I used and the present day excelsior. I have never noticed any difference in the excelsior.

Cross Examination.

The only thing I have ever noticed about the excelsior was whether it was new or old paper.

CHARLES W. PALMER,

called as witness for Defendants.

I am an employee of the National Grocery Company of Seattle, as Superintendent of warehouse, and have been so employed since 1923. We have used paper excelsior for so many years, I do not recall the exact date we started. We first purchased excelsior from Mr. C. C. Rafter. We never used it before buying from him. We had never seen or heard of such excelsior before. We were using wood excelsior. I clearly recall the interview with Rafter. A machine for shredding paper had been invented. We have used it continuously since. We started somewhere around 1923 or 1924. I remember very distinctly examining the paper. I never saw it made. It was long strips of newspaper. As near as I can remember, the strips were shredded and not cut. We have continuously used it and I have observed it from time to time to see that it was clean paper and there was no foreign matter in it. I have not observed any differences in the first excelsior and that we later received. The first paper excelsior we got was very much adaptable for packing purposes; and we have used it ever since because it was very successful, and much more satisfactory than wood excelsior.

Cross Examination.

Q. Mr. Palmer, did you not personally do any packing with this excelsior, did you?

A. Yes, I do.

Q. Wait a moment. In 1923 and 1924?

A. I packed more or less; I don't say—— [268]

Q. Did you personally do any paper excelsior packing in 1923 and 1924?

A. As far as the date is concerned, I can't just recall exactly the date, but as near as I can recall in my memory it was around that date.

(Deposition of Charles W. Palmer.)

Q. That you personally used the stuff to pack?

A. Yes, that I personally used it.

Q. Didn't you make an affidavit in this case?

A. Yes, I did.

When asked about an affidavit which he signed before C. W. Pierce, Notary Public, dated December 2, 1932, the witness admitted the affidavit as follows: "To the best of my recollection during that time as Superintendent I bought some paper from a man by the name of Rafter. That at the time of purchase I examined the product to see if it was serviceable for packing, found that it was. I did not personally do any packing with it, although the department has used it since then to the present date. During the period 1924-1925 I did not examine the strips of excelsior to determine if the edges were straight or jagged, and I cannot now state whether the same were torn or cut in the process of manufacture. I do not recall the width of the strips of the excelsior then, and I cannot state now whether they were wider or narrower then than now. I never paid any attention to the physical condition of the strips of excelsior, but considered it only as a packing material, nor did I ever closely examine the same. Original affidavit admitted in evidence, Plaintiff's exhibit A.

Redirect Examination.

I did not prepare the statement, Plaintiff's Exhibit 17. Where the affidavit states "I did not personally do any packing with it", I meant that I did not personally superintend the packing department. We have a man that superintends the packing department. In case of a rush I may go in that department and help. It is not my position to do any of the physical packing. I never saw the [269] machine in operation that made excelsior. As to the intervening years, whether the excelsior was straight-

(Deposition of Charles W. Palmer.)

edged or jagged. I never examined it close enough that I would commit myself on that question. I simply saw that it was a clean product. It made no difference to us whether it was rough or not.

When the witness was asked to examine the excelsior in Defendant's Exhibit 2, and state that if that bears the appearance of the excelsior first used, his answer was "Well, I will tell you, to me it is paper excelsior." I will have to answer that question exactly the same as I did, in an honest way, that as far as the edges of the paper are concerned, as far as the width of the strips are concerned, it was all paper excelsior to me. When I examined it I picked it up in my hand, and looked at it, sure.

CLAUDE C. RAFTER,

recalled as a witness for Defendants.

Direct Examination continued.

I am 51 years old. I wear glasses to read. I cannot distinguish objects clearly without any glasses. I went back to look for the excelsior which I had found in the box. I looked for it thoroughly, but I did not find it. I do not know what became of it.

Cross Examination Resumed.

All my standard machines had only one coil spring on the end of the top shaft opposite to the drive wheel. The spring was to regulate the knife, keep the knives from going too far over against the lower roll. The spring had two purposes. Without it, the top roll would go so far that it just creased the paper, but by having a tension spring there it could regulate the thickness of the cut. In other words, the purpose of the spring

(Deposition of Claude C. Rafter.)

was to provide for a lateral or side movement. The Wheeler machine had that spring. The coil spring is like the one shown in my application for patent.

I made an additional search for the excelsior I found in the box, but I couldn't find it. The excelsior in the box was all taken out. I don't know who took it. Mr. Hedrick was with me when [270] I made the search, the Defendant in this case.

I recall the conversation with Antonsen in 1931, about my patent application. He did not offer to pay me \$50.00 to examine my patent application. At that time I wanted to sell him my rights under that patent for \$250.00.

Q. Did you ever show him, before, your patent application?

A. No. I would like to add a little more to my answer.

Mr. FENLASON: Go ahead.

Q. Go ahead.

A. Mr. Antonsen asked me to come down to his office, and I did, and we talked about that I had something in my application that he would like to have and, if it was what he wanted, he would be willing to pay five hundred dollars, and I told him that I would gamble with him and take two hundred and fifty, providing he would sign papers protecting Mr. Hedrick's machine and the machine in Los Angeles that I had sold.

Q. Did you show him your application at that time?

A. No, I did not.

Q. Or a copy of it?

A. He tried to see it.

Q. But you did not show it to him?

A. No, I didn't.

Q. And he didn't pay you any fifty dollars?

A. No, he did not. He paid me fifty dollars for coal that he bought from me. That is why I came down to his office.

(Deposition of Claude C. Rafter.)

Q. But he did not pay you any fifty dollars for the application?

A. He did not.

Defendant's Exhibit 2 is a sample of paper excelsior I am now manufacturing. I am in that business now. I have been in that business about thirty days this last time. Certainly I am taking a great deal of interest in this case. There is a lawsuit against me for infringement and I am not guilty. [271]

Redirect Examination.

I got in touch with Antonsen in 1931. I was in the fuel business and he wanted to know why I didn't try to sell him, as he paid cash. I sold him fuel amounting to about \$50.00. He told me to come down to the office and collect, and the battle started. He asked what I was doing with my machine and I told him I wasn't doing anything. He said he thought I had something that he would like to have, and wanted to know what I would take for it. I asked what it was worth to him, and said Hedrick and the Los Angeles machine had to be protected. I had my attorney draw up such an agreement. Antonsen said it was too much for him, he didn't want to sign it, but said he might "wriggle around and find somebody else to buy it indirectly."

I am not guilty of infringement in operating my present machine. I understand the law is that as soon as my patent was rejected, it became public property.

Referring to the box of excelsior, Plaintiff's Exhibit B, the only explanation that I can make is that I got them mixed; I don't know just how but it was done in some way,—lost track of the other. This is the box I had some excelsior in to take out to prospective customers to sell it.

Statement of Counsel: (Mr. Winter) I want to offer in evidence for the purpose of bearing upon the credibility of the

(Deposition of Claude C. Rafter.)

witness the excelsior contained in Defendant's Exhibit No. 5 for identification, and particularly the three strips of excelsior, one of which has the statement on it "Condemnation April 3, 1931", and another of which contains the statement "Dr. L. K. Roberts, Ventura, California, National Champion of 1929", and the third of which has the statement on it "Vetoed by Hoover", and another one which contains the statement in quotations "Buy American" at the foot of a column. This statement is contained twice in this particular strip of paper. These four strips just referred to I am placing in a separate envelope, and I will ask the re- [272] porter to mark those as an exhibit on behalf of the Plaintiff. Thereupon, Defendant's Exhibit 5 for identification was marked Plaintiff's Exhibit B, and the envelope containing the four strips of paper hereinabove referred to were thereupon marked Plaintiff's Exhibit B1.

E. L. FOSTER,

called as a witness for Defendants.

I have known Antonsen since 1924 or 1925. I buy from the company he represents, paper and wood cartons. I also sold him the paper cutting machine I bought from Rafter when I came back from Boston. I have not talked with Mr. Antonsen on business. I have talked to Mr. Pierce and Mr. Antonsen about the matter here involved. I remember signing a statement on April 13, 1932, which you show me, and it was made before I talked to them. I first met Rafter around 1924. I was in the box business. I never saw paper excelsior before I met Mr. Rafter. I was told about it by a friend of mine. I negotiated to buy a machine to make excelsior after I had made some investigations.

(Deposition of E. L. Foster.)

Some fellows thought it was a great thing and preferred it to wood, and others did not seem to feel that way about it. It looked pretty good to me. I wanted to go back home to Boston partly due to that, and partly to investigation. I bought a machine to go to Boston. I left on the 27th of May, 1924, for Boston. I went to Rafter's place and I observed the excelsior made by Rafter, I would say it had both a smooth and feather edge, depending upon the number of thicknesses that were fed into the machine. Why I say that is because of the construction of the machine. Yes, I will read over the statement I made. I took the machine back to Boston and operated it there. It both cut and tore paper excelsior. It produced smooth edged and scalloped edged excelsior. It depended on the number of sheets you ran through. One sheet at a time would have a perfectly straight edge. I tried to put through as many sheets in order to get through as quickly as I could. When you would put a number of pieces through the spring would give and it would tear and not cut it straight. If there were five or six [273] pieces, I would put them through. Five or six pieces would be torn, I don't think three would. Those I think would be cut, depending upon the condition of the spring. There was a nut on the end for adjusting the tensions on the spring. I never changed the machine at all. I bought my extra newspapers from the Transcript, a daily paper of Boston. It ran about eight sheets to a feeding. It is eight years ago, and a man is bound to forget after eight years. I dropped some money back there and its not pleasant to think about. Rafter and Mitchell asked me for that statement, and said "Give us your ideas". I don't know whether I told them there was a spring or a nut there. I am trying to be fair and impartial. I didn't see any difference in the excelsior produced by Mr. Rafter on his machine and the

(Deposition of E. L. Foster.)

excelsior produced by my machine in Boston. I was in Boston June, July and August. I had the machine set up for about a month there. Then I came back to Seattle and sold the machine to Mr. Antonsen.

Cross Examination.

I bought the machine from Mr. Rafter with the exclusive right to manufacture in Massachusetts, then I paid him \$500.00 additional for the right to operate in Connecticut. Plaintiff's Exhibit C, copy of the contract between Rafter and Foster for Boston admitted in evidence.

My paper excelsior venture in Boston was not a commercial success. I couldn't sell it to the packers back there. I made up about a ton of sample excelsior and gave bales of it to different users, the Westinghouse Electric, Chase and Company, and others, the names of whom I don't remember. No one would buy it until they had tried it out. In every occasion where I put in a sample I was not successful in selling. I didn't sell a cent's worth. I tried to sell excelsior between six weeks and two months. I devoted my entire time to that business.

When the machine was crowded, it would tear instead of cut. If six layers of paper were fed through, it would start cutting, and [274] then the knives would gradually separate and tear. I didn't have any particular trouble with the machine clogging.

When I bought the machine the discs were sharp, the discs on the upper and lower roll were touching, held in contact by a spring. In my opinion, the machine was essentially a cutting machine.

Redirect Examination.

I did not grease or oil the cutting edges of the discs. I do not know how fast the discs operated, as to number of revolutions. I never had an opportunity to try the machine to see if

(Deposition of E. L. Foster.)

especially when folded newspapers were run through said machine.

“In the front, there was a nut on the end of one of the shafts so that the knives could be spaced in position to tear rather than cleanly cut the paper.

“I know that in the spring 1924, Mr. Rafter was making the kind of paper excelsior above mentioned and was selling it for packing purposes in Seattle, Washington.”

“On March 17, 1924 I entered into a contract in writing with Mr. Rafter to purchase one of said paper excelsior machines for use in Boston, Massachusetts. I received delivery of said machine, shipped it to Boston and manufactured excelsior there in 1924 from newspapers of the same kind that it was then and is now being made. The excelsior so made by me with said machine was feather edged, due to the fact my machine tore rather than cut the newspapers fed into it.

“I returned from Boston to Seattle in 1924 and had my machine shipped here, and I sold it to Louie P. Antonsen in 1925.”

“Signed”,—what are your initials?

A. E. L.

Q. Did you make this statement?

Mr. WINTER: Objected to as an attempt to impeach his own witness, and as improper.

Mr. FENLASON: I think the record shows here that this man is more friendly to Antonsen than he is to Mr. Rafter, and it is also offered for that purpose. It is offered for the further purpose that, in certain respects, his testimony here was in the nature of a surprise, not having been previously disclosed, contrary to [277] statements he had previously made.

Mr. WINTER: Wait just a moment. Let me ask a couple of questions.

(Deposition of E. L. Foster.)

Q. (Mr. Winter) Didn't you talk to counsel, Mr. Fenlason, yesterday or the day before, here about this case?

A. I might have been introduced to him but there was no lengthy conversation.

Q. Did he ask you at that time whether this *man* was a cutting machine or a tearing machine and didn't you tell him it was a cutting machine?

A. Yes, sir.

Q. What?

A. Yes, sir. Some gentlemen asked me. I think it was Mr. Fenlason.

Q. Asked you whether it was a cutting or tearing machine and you told him it was a cutting machine?

A. Yes.

Mr. WINTER: We stand on our objection.

Q. (Mr. Fenlason) How long did we talk together?

A. Oh, not over a couple of minutes, or a minute, I would say.

Q. About a minute?

A. Yes, sir.

Q. Didn't I tell you I would get in touch with you later and call you the following day?

A. You told me, yes, sir, that you would call me later; whether it was the following day or not——

Q. (Mr. Winter) But you did talk long enough so that you told him that this was a cutting machine and not a tearing machine, though?

A. Yes, I told him that. Didn't I?

Mr. FENLASON: No. Now, wait a minute.

(Deposition of E. L. Foster.)

Q. (Mr. Fenlason) Did we say anything about “cutting” or “tearing”?

A. Yes, sir, that question was asked me, whether it was a tearing or cutting machine. [278]

Q. Let me refresh your recollection. Did I say anything about tearing or cutting. Didn't I ask you whether or not, according to your recollection, these knives were in facial contact? Isn't that what happened?

A. I think you asked me if they were in contact and I told you that they were.

Q. And that is what you told me, is it?

A. That they were, on account of the spring on the end holding them in position.

Q. As a matter of fact, we never discussed anything else but that.

Mr. WINTER: That is cross-examination.

Mr. FENLASON: All right.

Q. Did we discuss anything else than that? Did we discuss anything else other than that?

Mr. WINTER. I object to that question as being cross-examination.

A. Didn't you ask me, Mr. Fenlason, if in my opinion, it was a cutting or a tearing machine?

Q. If I answered that, I would say No. The only recollection——

A. My recollection that the last question you asked me was if, in my opinion, it was a cutting or a tearing machine, and I told you it was a cutting machine, and you said “Why?” and I said “Because of the spring on the end of the upper roll.”

(Deposition of E. L. Foster.)

Q. Do you remember distinctly whether I made inquiry as to whether these were in facial contact, referring to the discs?

A. I am pretty sure that you did and I think that led up to the last question.

Q. I got in touch with you this morning, didn't I, over the telephone?

A. Was it you that called me up and asked me to be here at 9:30?

Q. Yes.

A. Yes. I am sure it was you.

Q. Before that, before yesterday had I ever seen you in your life [279] to your knowledge?

A. No.

Q. Did you ever talk to me in any manner or way whatsoever except the conversation we had at that time?

A. No, sir, not that I know of.

Q. Did I talk to you at all before your coming in here to this examination this morning?

A. Except that one short interview yesterday morning.

Q. And except over the 'phone?

A. And except over the telephone.

Q. Was there any discussion over the 'phone relative to testimony?

A. Over the 'phone?

Q. Yes.

A. No, sir.

Mr. WINTER: Let's see that statement, the statement or alleged statement which the witness made.

Mr. FENLASON: Wait a minute.

Mr. WINTER: The alleged statement that you made, is that in your handwriting?

(Deposition of E. L. Foster.)

The WITNESS: No, sir.

Mr. WINTER: Go ahead.

Q. The signature appended to it, is that in your handwriting?

A. Yes, sir.

Q. Did you read it over before you signed it?

A. I glanced it over, yes, sir.

Q. Was it true when you signed it?

A. I told Mr.——

Q. Was it true when you signed it?

A. I told Mr. Mitchell and Mr. Rafter at that time that this was a long time ago and you can see—There, I was under the impression I paid a thousand dollars, and he said I paid twelve hundred.

Q. Did you make this statement?

A. I told him—I was in a hurry the day they were there and I gave [280] them answers to the best of my knowledge; the first time that I had been approached.

Q. Yes.

A. And the first time I had talked about the deal, of course, since I sold the machine to Antonsen, and then there was nothing said about cutting or tearing paper.

Q. You say that during the conversation here that nothing was said to you about cutting or tearing of the paper?

A. Yes, in this one here there was.

Q. You mean when you sold the machine to Antonsen?

A. When I sold the machine to Antonsen there was nothing said then.

Q. You had never talked to Antonsen about the machine subsequent to the time that you sold him the machine and prior to the time of this interview that occurred on April 13th?

(Deposition of E. L. Foster.)

A. You mean, between the time I sold the machine and the time I made that statement?

Q. Yes.

A. Did I talk to Antonsen regarding the machine? The machine that I had?

Q. No, regarding the type of excelsior produced by it?

A. No, I do not think so. He had told me that he had improved the machine that we had.

Q. Yes.

A. And that it made a better product, in his opinion, but we did not go into the nature of the machine or how it worked or anything like that.

Q. You signed this statement, didn't you?

A. Yes, sir, that is my signature.

Q. You read it over before you signed it?

A. I glanced over it. As I told you, I was in a hurry. I told these fellows then that I did not want to—I would not swear to anything. There was no oath taken and it was not under *deal*. Those are my answers to the best of my ability at the time that I had to [281] give to the fellows.

Mr. FENLASON: I think that is all. Just a minute.

Q. Do you know or did you know who Mr. Mitchell was?

A. I think he is connected with some paper outfit, the Pacific Paper, or Waste Paper Material or something.

Q. Was he introduced to you as an attorney, or do you recall?

A. I do not recall. I think he was, though. I think he was the attorney for some paper company.

Q. Do you know whether he was introduced to you as living in Portland or Seattle?

(Deposition of E. L. Foster.)

A. No, I do not. I would say, Longview, because I have the impression that the paper outfit was at Longview.

Mr. FENLASON: That is correct. He is the attorney for that paper concern down there. That is all.

Q. (Mr. Winter) Who introduced him?

A. Mr. Rafter.

Q. He brought him down there?

A. Yes, sir.

MRS. E. G. WRIGHT,

called as witness on behalf of Plaintiff.

I am acquainted with Mr. Antonsen, the Plaintiff. I have known Mr. Rafter fifteen years. I worked in his factory for him in 1923 and 1924, more as a pastime than anything else, and I knew his wife, and was on friendly terms with her before that. My work in the factory was cutting paper excelsior. I worked in the afternoons over a period of three to five months. There were wheels going around. We kind of unfolded the papers and laid them here; sat here and fed them. I think we fed them on a canvas. I wouldn't like to be positive, but there was something that carried the paper into the machine. I fed the paper to the machine. I had trouble operating the machine when I fed the paper too thick. The machine would clog, stop running entirely. That happened as often as I fed too much paper. I opened up the sheets of paper flat. This [282] was newspaper, the full double page. I can't be positive as to the number of sheets that went through at one time, I paid so little attention to it. The excelsior was cut in straight strips. I don't know any other way that it would be cut other than just straight. Put it in straight

(Deposition of Mrs. E. G. Wright.)

and it cut straight. When too much paper was fed to the machine, it stopped and chewed up the paper. We had to take a wire brush and clean it out, then the edges of the paper were not straight. We used only newspapers for the excelsior, except one time Mr. Rafter brought some embossed paper from candy boxes. The machine wouldn't cut that. That stuck. No one else cut that paper that I know of. Maybe it was too thick or something. I don't know what done it. The mechanical part of it, I don't know. If paper were torn, the edges would be irregular and uneven. If cut, the edges would be straight. The excelsior produced on Mr. Rafter's machine by me had perfectly straight smooth edges "cut just the same as with scissors."

Cross Examination.

I have not seen Mr. Rafter's present machine, nor the excelsior he is now making. Two pieces of excelsior were taken from Defendant's Exhibit No. 2, and exhibited to the witness, who testified as follows: That is not the same as the excelsior cut by Mr. Rafter's machine. Mr. Rafter's excelsior was "straight and wider." It was not twice as wide, but wider. As I remember, Rafter's excelsior had an absolute straight edge. Well, I didn't examine it. I looked at it for so long a time. It piled up in front of the machine, and we would take a pitch fork and throw it back. It piled up in a sort of a haphazard pile on the floor. As it fell down from the machine it just piled down there as it rolled out of the machine, not all straight in a neat little pile. When you are pitching hay on a pile you won't pitch right on top of another. This is just the way it looked as it fell out of the machine, just the way it fell out of the machine. It was pretty well mixed up when you took a pitch fork and mixed it up. The two strips of paper excelsior [283] exhibited to the

witness from Defendant's Exhibit 2 were placed in an envelope marked Defendant's Exhibit 2A. Defendant's Exhibit 7 shown to the witness. The excelsior had straight edges like that, just like it was cut with scissors. I have four boys. At various times they have all worked for Mr. Antonsen in his delivery business and two are now working for him. I have never talked to Mr. Antonsen about this case before this suit, but I talked to Mr. Pierce, Antonsen's attorney, in Pierce's office. That was two or three months ago. I never gave any thought or attention to the appearance of the edge of this paper excelsior until I talked to Mr. Pierce. My testimony here is from my present recollection. Antonsen was down to the Rafter plant while I was working there making excelsior. I do not know whether the cutting knives were in contact. I never saw any sparks. They never set any paper afire. I absolutely never oiled the blades. Rafter and his wife operated the machine some. His sons operated the baler. When asked if the conveyor belt feeding paper to the machine was about three or four feet long, the witness said "I wouldn't get on the stand and testify to that." I never did any packing with excelsior. All I did was feed the machine, take a pitchfork and throw it away from in front of the machine. There was no particular occasion to notice the excelsior. Mr. Antonsen came down to the plant sometime in the afternoon to see me. I can't fix the date of the first time he came. I don't think it was in 1923. He came down to find out something about the papers my boys were delivering. He went to my house and then to the plant where I was working. He wanted to buy the machine from Mr. Rafter to get into the paper excelsior business. Mr. Antonsen told me if I would get the sale of the business to him, he would pay me \$50.00. I discussed with Mr. Rafter about selling to Antonsen. Mr. Antonsen first approached me on the purchase of the business, said he would pay me to switch the sale of the business from another person to him, he would pay me

(Deposition of Mrs. E. G. Wright.)

\$50.00. I told Mr. Rafter about what I was to get and it was agreeable with him. [284]

I ran two or three sheets through and more though not very many. I have no idea how many more. It was a very disagreeable thing when it got stuck. The embroidered paper that comes around candy boxes was the kind of paper that would not cut on the machine. It was heavier than newspaper. If there were too many pieces of paper, it wouldn't run through. I don't know what the trouble was or the horsepower of the motor. It had the same kind of edge if it did run through, regardless of the number of sheets that were fed to the machine. The machine I operated was the one that was sold to Antonsen. I would cut quite a pile if everything went all right. Rafter was able to dispose of all he made.

I know Mr. Henderson. He ran a shoemaking shop across the street. He was quite uneasy about the place. I never saw him examine any of the excelsior. He was quite nosey. If he didn't, I don't see why he didn't. I know Mr. Ryan. I don't ever remember seeing him much around. I did not tell Mr. Antonsen about sales of any other machines being made, but I suppose he knew.

That white paper from wider boxes would not go through the machine. The knives revolved once, and that was the end of it; it would not cut. I could cut it with shears. The power to the machine would have to be shut down. I do not know anything about the little spring on the machine. In talking to Mr. Antonsen I don't think I mentioned the business or how it was doing. I never saw paper excelsior before that time. Have not examined any excelsior lately. Defendant's Exhibit No. 7 admitted. I never knew Mr. Hedrick in Portland.

Filed May 9, 1936.

G. H. MARSH, Clerk. [285]

AND AFTERWARDS, to wit, on Saturday, the 9th day of May, 1936, the same being the 56th JUDICIAL day of the Regular March, 1936, TERM of said Court; present the HONORABLE JAMES ALGER FEE, United States District Judge, presiding, the following proceedings were had in said cause, to wit: [286]

[Title of Court and Cause.]

ORDER.

The plaintiff in the above entitled cause having submitted to the court a statement of the evidence in accordance with the rules prescribed by the Supreme Court of the United States,

IT IS ORDERED that the said plaintiff be permitted to set out portions of the evidence in the form of questions and answers and that the portion of the said statement of the evidence in the form of questions and answers be and the same is hereby approved.

Dated, May 9, 1936.

JAMES ALGER FEE,
District Judge.

[Endorsed]: Filed May 9, 1936. [287]

AND AFTERWARDS, to wit, on Saturday, the 9th day of May, 1936, the same being the 56th JUDICIAL day of the Regular March, 1936, TERM of said Court; present the HONORABLE JAMES ALGER FEE, United States District Judge, presiding, the following proceedings were had in said cause, to wit: [288]

[Title of Court and Cause.]

ORDER.

Now at this day IT IS ORDERED that the opinion rendered by the court upon the conclusion of the trial of this cause be filed in this cause, and that the same be now filed nunc pro tunc as of and for April 29, 1935.

Dated, May 9, 1936.

JAMES ALGER FEE,
District Judge.

[Endorsed]: Filed May 9, 1936.

AND AFTERWARDS, to wit, on the 9th day of May, 1936, there was duly filed in said Court, a Stipulation to Send Original Exhibits to Court of Appeals, in words and figures as follows, to wit: [290]

[Title of Court and Cause.]

STIPULATION.

It is hereby stipulated and agreed between the parties to the above cause, through their respective attorneys of record that Plaintiff's original exhibits 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, and Plaintiff's Exhibits from the record on deposition A, Affidavit of C. W. Palmer; B, Box of paper excelsior, previously marked

Defendants' Exhibit No. 5 for identification; B-1, 4 strips of paper excelsior contained in Exhibit B; C, Foster Agreement, and Defendants' original Exhibits A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, CC, DD, EE, FF, GG, HH, II, and Defendants' Exhibits from the record on deposition 1, 2, 3, 4, 5, For Identification, 6, 7, 2-A, may be transmitted as a part of the record for filing in the Circuit Court of Appeals, in lieu of copies thereof, and it is necessary and proper that said exhibits be inspected by the Circuit Court of Appeals on Appeal.

It is further stipulated and agreed that the papers, instruments and exhibits, and the statements of the witnesses and Court proceedings as enumerated in the Praecipe for Transcript of Record on file herein constitute all the papers, pleadings, exhibits, documents and statements of evidence and court proceedings that [291] are essential to the decision of the questions presented by this appeal, and that the statement of the evidence is true, complete and properly prepared.

CLARENCE W. PIERCE,

Attorney for Plaintiff.

C. O. FENLASON,

Attorney for Defendant.

[Endorsed]: Filed May 9, 1936. [292]

AND AFTERWARDS, to wit, on Saturday, the 9th day of May, 1936, the same being the 56th JUDICIAL day of the Regular March, 1936, TERM of said Court; present the HONORABLE JAMES ALGER FEE, United States District Judge, presiding, the following proceedings were had in said cause, to wit: [293]

[Title of Court and Cause.]

ORDER DIRECTING TRANSMITTAL OF
ORIGINAL EXHIBITS.

It appearing necessary and proper in the opinion of this Court,
IT IS HEREBY ORDERED That original exhibits of the
Plaintiff numbered Plaintiff's Exhibits 1, 2, 3, 4, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29,
and Plaintiff's Exhibits from the record on deposition A, Affidavit
of C. W. Palmer; B, Box of paper excelsior, previously marked
Defendants' Exhibit No. 5 for identification; B-1, 4 strips of
paper excelsior contained in Exhibit B; C, Foster Agreement,

And original exhibits of the Defendant numbered Defendant's
Exhibits A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q,
R, S, T, U, V, W, X, Y, Z, CC, DD, EE, FF, GG, HH, II, and
Defendant's Exhibits from the record on deposition 1, 2, 3, 4, 5
For Identification, 6, 7, 2-A,

In the above entitled cause shall be transmitted as a part of
the record to the Circuit Court of Appeals for the 9th Circuit
for the inspection of that Court, and the Clerk of the above
entitled Court is hereby directed to transmit to the Circuit [294]
Court of Appeals for the 9th Circuit the exhibits above enumer-
ated, all as a part of the record of this appeal.

Dated this 9th day of May, 1936.

JAMES ALGER FEE,
Judge.

Presented by CLARENCE W. PIERCE.

Approved:

CLARENCE W. PIERCE,
Attorney for Plaintiff.

C. O. FENLASON,
Attorney for Defendant.

[Endorsed]: Filed May 9, 1936. [295]

United States of America,
District of Oregon.—ss.

I, G. H. Marsh, Clerk of the District Court of the United States for the District of Oregon, do hereby certify that the foregoing pages, numbered from 2 to 295 inclusive, constitute the transcript of record upon the appeal from the judgment of said Court in a cause then pending therein numbered E-9311 in which Louie J. Antonsen is plaintiff and appellant, and C. C. Hedrick, individually and doing business under the assumed name and style of Paper Excelsior & Pad Co., is defendant and appellee; that the said transcript has been prepared by me in accordance with the praecipe for transcript filed by said appellant, has been by me compared with the original thereof, and is a full, true and complete transcript of the record and proceedings had in said court in said cause, in accordance with the said praecipe, as the same appear of record and on file at my office and in my custody.

I further certify that the cost of the foregoing transcript is \$45.95 and that the same has been paid by the said appellant.

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed the seal of said court, at Portland, in said District, this 4th day of June, 1936.

[Seal]

G. H. MARSH,
Clerk. [296]

[Endorsed]: No. 8235. United States Circuit Court of Appeals for the Ninth Circuit. Louie J. Antonsen, Appellant, vs. C. C. Hedrick, Individually, and doing business under the assumed name and style of Paper Excelsior & Pad Co., Appellee. Transcript of Record. Upon Appeal from the District Court of the United States for the District of Oregon.

Filed June 13, 1936.

PAUL B. O'BRIEN

Clerk of the United States Circuit Court of Appeals
for the Ninth Circuit.

